

Supporting the development of environmentally literate nurses through curricula education.

Education curricula should support the development of environmentally literate nurses

Commentary: Alvarez-Nieto, C., Richardson, J., Navarro-Peran, M.A., Tuttici, N., Huss, N., Elf, M., Anaker, A., Aronsson, J., Baid, H., Lopez-Median, M., 2022 Nursing students' attitudes towards climate change and sustainability: A cross-sectional multisite study. *Nurse Education Today*. 108. 105185. ¹

Implications for practice and research

- Climate change and sustainability education should be incorporated within nursing curricula to support the development of environmentally literate nurses.
- Future research must consider how global healthcare can diminish its carbon footprint and integrate sustainability.

Context

Changes in the climate system as a direct consequence of human activities cause severe weather conditions, which adversely impact on human health². Nurses are the largest healthcare profession in the world and have the potential to significantly address the effects of climate change, in multiple ways, including reducing the world's healthcare footprint, currently '4.4% of global net emissions'³ (p4). Incorporating formal education within nursing curricula, on the health impact of climate change, is key to raising social awareness and developing evidenced actions to mitigate climate change.

Methods

The research¹, part of a larger study, utilised a cross-sectional multi-centre settings approach to investigate changes in nursing students' attitudes and awareness of climate change and sustainability compared with 2014 results. Seven universities/schools of nursing in five countries were included, based on their attempts to incorporate sustainability into undergraduate nursing programmes and sustainability topics within teaching and assessment. First-year nursing students were invited to complete the Sustainability Attitudes in Nursing Survey (SANS_2), which used a Likert-type scale. The SANS_2 was translated and validated in French, German, Swedish and Spanish. Self-administered online or paper questionnaires, based on the organisations' resource availability, were completed on a voluntary basis, at the start of term prior to teaching, to avoid possible bias. Participating organisations gained ethical approval for the study. University data were compared using Kruskal-Wallis and Mann-Whitney U tests.

Findings

879 participants from seven institutions answered the questionnaires, 33 questionnaires were excluded as unfinished or incorrectly completed, the final sample size was n = 846. Mean scores for all items and the global SANS_2 showed significantly higher values in 2019 when compared to 2014. All students reported positive attitudes towards climate change and sustainability as an important issue for nursing. The overall highest score was reported by participants from Dalarna university, on sustainability, as an important issue for nurses. These students also scored higher on the use of sustainability principles at home. When asked about the inclusion of climate change and sustainability into nursing curriculum, students from Esslingen-Tublingen, scored highest, while students from the Universities of Jaen and Murcia scored lowest.

Commentary

This study adds to the growing body of evidence demonstrating nurses' awareness and commitment to addressing climate change with nursing expertise and action. However, although some nurses practice sustainability in their private lives⁴, and many are caring for patients affected by the effects of climate change, they are simultaneously negatively contributing to climate change as part of the healthcare carbon footprint. Incorporating climate change education within nursing curricula has the potential to address this dichotomy, by providing nurses with the skills and knowledge to inspire and facilitate climate change action within populations and communities, and for individuals.

As health advocates, it is essential that nurses lobby for improved climate change policies⁵, while nurse researchers can contribute collaboratively to the evolving body of data on climate and health impact and develop evidenced solutions. Within healthcare settings, nurses can influence the procurement and efficient use of sustainable resources, including healthcare transportation systems, use of climate-friendly methods of waste disposal, and sourcing locally grown fruit and vegetables⁴. In some setting, nurses can also contribute to the development of plans to manage climate change emergencies, caused by severe weather conditions⁵. The multiple nursing everyday interactions with patients, provide opportunities to share climate change information to moderate effects. There are also many sustainable lifestyles actions nurses can adopt in their private lives to reduce their carbon footprint.

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