

Nursing at the heart of global climate action and policy: A critical commentary

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Introduction

Climate change has rapidly shifted from a distant environmental concern to an immediate determinant of global health [1]. Healthcare systems, ironically designed to protect and restore health, now contribute substantially to the very crisis that threatens population wellbeing [2–4]. This makes the sector both a victim of climate change and a substantial contributor to it. Consequently, the question is no longer whether healthcare should become more sustainable, but how rapidly and effectively that transformation can occur.

Against this backdrop, our recent article offers a timely and ambitious exploration of nurses' and midwives' awareness, perceptions, and practices regarding climate change and sustainable healthcare [5]. Drawing on responses from nearly 500 participants across 56 countries, the study provides one of the most geographically diverse snapshots to date of how the world's largest healthcare workforce understands its role in climate action.

The importance of this work extends beyond nursing. The study findings provide valuable insights into the current state of nursing engagement with climate and sustainability agendas. The findings, again, reveal a profession that is willing, concerned, and increasingly aware but still constrained by organizational, educational, and systemic barriers. While this work was positioned as exploratory, the patterns revealed are too consistent and too urgent to ignore.

This commentary critically analyses the study's contributions, situates its findings within current global discourse, and argues for a more assertive integration of sustainability into nursing practice, education, leadership, and policy.

Why This Paper Matters Now?

Health sector decarbonization is no longer a niche goal. Since late 2023, frameworks for climate-resilient and low-carbon health systems have been scaling across ministries, professional bodies, and hospital groups. The authors' finding that two-thirds of respondents were unfamiliar with 'net-zero healthcare' despite strong pro-climate attitudes point to the implementation chasm between global commitments and bedside realities [5,6]. Similarly, the remarkable low awareness of organizational sustainability officers, climate initiatives, and transportation schemes probably indicate that these beneficial features have not been developed or implemented in many healthcare organizations.

Healthcare organizations worldwide have invested heavily in sustainability strategies, carbon reduction plans, and environmental governance structures. Yet if frontline staff remain unaware of these initiatives, their effectiveness is inevitably compromised. Sustainability cannot be achieved solely through executive policies or strategic documents. It requires engagement from the workforce responsible for delivering care every day [7]. Workforce leverage is decisive in the sustainability and climate agenda. The paper's observation that nearly nine in ten respondents expressed willingness to

participate in climate action initiatives, together with the finding that nurses can directly influence employer practices, speaks to substantial unrealized organizational leverage [8].

These findings suggest that the profession has moved beyond debates regarding the existence or significance of climate change. Many nurses now recognize climate change as a health issue that directly affects patient outcomes, healthcare delivery, and societal wellbeing. Earlier studies often reported limited understanding among nurses regarding the links between climate change and clinical practice. Environmental sustainability was frequently viewed as peripheral to nursing responsibilities, overshadowed by immediate patient care priorities. The current findings indicate that this perception may be changing [9].

According to Lancet Countdown report, climate change diverts funds from growth-oriented projects to disaster recovery and mitigation. This framing is essential because it positions climate change as a structural determinant of health and a driver of inequity. These are issues that sit squarely within nursing's ethical mandate [10]. The survey findings therefore raise difficult questions for healthcare leaders. Are sustainability strategies being communicated effectively? Are climate policies being integrated into operational workflows? Do staff perceive environmental sustainability as relevant to their clinical responsibilities?

The results suggest that many organizations may be failing to translate strategic ambitions into frontline practice. This is particularly important because nurses' collective decisions influence procurement, waste management, medication use, energy consumption, patient education, and organizational culture. Small changes in nursing practice, when implemented at scale, can have substantial environmental impacts. Conversely, sustainability initiatives that fail to engage nurses are unlikely to achieve meaningful system-wide transformation.

From Willingness to Action: The Implementation Gap

The survey sheds light on an enduring challenge within healthcare sustainability i.e. the gap between willingness and action. Nearly 90% of respondents expressed interest in climate action, yet only around half reported active participation in advocacy or environmental initiatives. This discrepancy is not surprising. Across many sectors, climate concern does not automatically translate into behavioral change [11]. The healthcare settings present additional challenges because clinical priorities often take precedence over environmental considerations. Nurses operate in complex, resource-constrained environments where patient safety, staffing problems, workload pressures, and regulatory requirements dominate decision-making. In the survey, workload and insufficient organizational support were identified as major barriers to sustainable practice.

These findings resonate strongly with the realities of contemporary healthcare systems. Since the COVID-19 pandemic, many countries have experienced persistent workforce shortages, increased patient demands, and growing clinical complexity. Under such conditions, sustainability initiatives may be perceived as additional burdens rather than integral components of quality care [12]. This then highlights an important lesson for policymakers. Nurses should not be expected to compensate for systemic shortcomings through personal commitment alone. Sustainable healthcare requires structural support, adequate staffing, accessible training,

leadership engagement, and organizational cultures that recognize environmental stewardship as a core aspect of professional practice [13].

Importantly, respondents also proposed practical solutions. Improved waste segregation, quality improvement projects, reusable alternatives, educational initiatives, and sustainable procurement practices emerged as recurring themes. These suggestions demonstrate that nurses are not merely identifying problems, they are contributing valuable ideas for addressing them. Such frontline expertise should be recognized as a strategic resource. Sustainability programs are often designed by executives, environmental managers, or external consultants, yet nurses possess unique knowledge that is often less involved in planning processes. Incorporating their perspectives could enhance both effectiveness and implementation.

Interpreting the Findings in Today's Policy and Practice Context

Interpreting the findings in today's policy and practice context shows that awareness without enablement is a design failure rather than a motivation failure. Although 86% want to learn more, the reported barriers are structural. Training must therefore be paired with standard operating procedures that make the green choice the default, role clarity through green champions or sustainability officers embedded in governance, and systems of measurement, feedback, and accountability [14].

The findings reinforce that procurement is one of the health system's climate hinges and that waste segregation remains a solvable behavior-infrastructure problem [7,15]. The study highlights improper segregation as a high-yield target where bin standardization, national color coding, line-of-sight signage, and periodic bin audits with visual feedback could reduce contamination. Aligning staff KPIs with contamination-rate improvements and creating unit-level dashboards can further strengthen behavior change [16].

Furthermore, an equity and justice lens highlights who bears the burden. Although the survey's 'moral duty' theme is powerful, moral appeals can backfire where nurses already face high emotional labor and staffing shortages. Reframing sustainability as a system responsibility rather than an individual obligation may therefore be more effective.

Notably, infection prevention and control (IPC) concerns ranked ninth as a barrier, challenging the routine assumption that IPC is the chief blocker of greener practice. This invites more nuanced, co-designed protocols where IPC and sustainability are treated as complementary safety attributes rather than adversaries [17]. Nursing has always professionalized intuition into protocol. The survey shows that the intuition is already there, i.e. ethical drive, recognition of the linkage between practice and climate, and readiness to act. What is missing is the protocol, that is the shared language, standardized processes, measurable goals, and institutional accountability. The path forward is not another awareness week, but a systems-level shift led by nurses rather than one that simply asks more of them.

Future Perspectives

Future sustainability efforts should move beyond simplistic trade-off narratives. Rather than asking whether healthcare can afford to become sustainable, leaders should focus on how sustainability can strengthen resilience, efficiency, and quality of care.

The study's findings also have profound implications for nursing education. Ninety percent of respondents reported no mandatory workplace training on climate change and nursing practice, while a substantial majority expressed interest in learning more. This represents both a challenge and an opportunity. The absence of structured climate education suggests that many healthcare systems have yet to recognize sustainability as a core professional competency [18]. Yet the appetite for learning indicates a receptive audience. Several professional organizations have already begun integrating sustainability into competency frameworks and educational standards [19], although implementation remains uneven globally. The findings reinforce calls for systematic incorporation of climate and sustainability content throughout undergraduate, postgraduate, and continuing professional development programs.

Nursing's longstanding contribution has been central to advancing public health reform, health promotion, and social justice movements throughout history. Climate change increasingly intersects with each of these domains. Climate advocacy therefore aligns directly with nursing's commitment to equity and population health [9,10].

The study's global scope is one of its greatest strengths. With participants from Africa (29.8%), Europe (41.1%), North America (17.7%), and beyond, the survey captures diverse perspectives often missing from climate-health research, which tends to be dominated by high-income countries. Although the findings should be interpreted as indicative rather than representative, the consistency of themes across regions suggests that these issues transcend national boundaries. This global resonance underscores the need for international nursing bodies, such as the International Council of Nurses, to take a more assertive leadership role in climate advocacy.

Implications for Policy and Practice

Healthcare organizations must integrate climate metrics into accreditation and regulatory frameworks, appoint sustainability officers with clinical representation, and ensure nurses sit on procurement and environmental committees. These steps would address the policy-awareness gap identified in the study. The respondents explicitly called for curriculum integration, particularly in the first year of training. This aligns with global recommendations from the World Health Organization and the Lancet Countdown [6,10]. Education should include carbon literacy, sustainable clinical skills, green quality improvement, and planetary health frameworks. Mandatory workplace training is equally essential where possible. Additionally, sustainability in qualitative improvement (SUSQI) projects can be utilized to integrate environmental conscious care into nursing practice [7].

Nurses also need tools, time, and authority to implement sustainable practices. This includes clear waste segregation systems, evidence-based PPE guidelines, access to green champions or sustainability leads, and opportunities to participate in climate-related quality improvement projects. Without these supports, sustainability remains aspirational rather than actionable.

Conclusion

The central message emerging from this study is clear, awareness alone is insufficient. Healthcare systems must move beyond informing nurses about climate change and begin equipping them to act. This requires investment in education, leadership development, workforce engagement, and organizational infrastructure.

Sustainability must become embedded within routine healthcare delivery rather than treated as a separate or optional agenda. This paper echoes the statement made by Ebenezer Akore Yeboah at the Royal College of Nursing Congress in Wales in 2024: "If the planet were a being, it would have expressed its emotions by saying, 'Enough is enough' [20]."

In summary, our study [6] has provided a timely, practice-close map of where nursing climate action stands currently. The study's findings should serve as a wake-up call for healthcare leaders. If governance, procurement, IPC, and education are aligned, nurses' everyday decisions can add up to health systems net zero agenda. However, this responsibility extends beyond nursing to all healthcare providers. Only through coordinated, system-wide action across the multidisciplinary workforce can healthcare systems protect human health today while safeguarding the environmental conditions that make health possible tomorrow.

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