

Midwives: Essential guardians in the climate crisis journey

Deepti Ganapathy¹, Maria Tzeli², Victoria Vivilaki³

This year, the theme of the International Day of the Midwife 2024 is 'Midwives: A Vital Climate Solution'.

At the 28th Conference of Parties (COP) summit in Dubai, held in December 2023, a notable development occurred: a dedicated day to health within the COP framework. The health pavilion at COP28 garnered significant attention, positioning itself as a direct consequence of climate change.

Over the years, political leaders, businesses, health organizations, and advocacy groups have convened at COP meetings to push for consensus on Climate Action. By spotlighting a day dedicated to health, COP28 provided a crucial platform for highlighting the health implications of climate change. Communicating this message effectively to relevant stakeholder groups has been a key challenge in the ongoing discussions surrounding climate change and its impact on health.

With the proclamation 'Midwives: A Vital Climate Solution', the International Confederation of Midwives (ICM), representing 108 member associations in 98 countries, underscores a sobering reality: a global shortage of 900000 midwives persists, compounded by discrimination, not enabling working conditions, and unequal pay within the profession¹.

In the midst of a climate crisis, characterized by uncertainty and geopolitical unrest, vulnerable populations, including climate refugees and those below the poverty line, often bear the brunt of its effects. In such situations, midwives emerge as indispensable first responders, rushing aid to women and children in extreme climate events or conflict zones, thereby fulfilling Sustainable Development Goals (SDGs) 2 and 5.

Despite their critical role, midwives are frequently side-lined from health services leadership, policy-making, and stewardship. Creating an enabling environment for midwives is imperative, necessitating strategic litigation for improved salaries. The PUSH movement, spanning a decade, advocates for the rights and autonomy of women and midwives alike²⁻⁵.

The work of midwives forms the bedrock of women's reproductive rights⁶⁻⁸. Yet, millions of lives are lost annually in childbirth due to the undervaluation and under prioritization of midwives' skills. From providing access to contraception for 220 million women and girls to averting the needless deaths of 2.7 million women and newborns annually during pregnancy and childbirth, midwives save lives and champion women's health activism¹.

As we grapple with the challenge of meeting basic health needs and integrating every healthcare provider into a dignified healthcare infrastructure, the current climate crisis and global warming have cast a glaring spotlight on our healthcare systems⁹. The impact of climate change on human health presents a multifaceted challenge that will require sustained efforts for years to come¹⁰.

Midwives can contribute to addressing climate change-related health challenges through advocacy, education, and other interventions within healthcare systems¹¹⁻¹⁵:

1. **Advocacy and Education:** Midwives can advocate for policies and initiatives aimed at reducing greenhouse gas emissions by educating pregnant women and new mothers about environmentally friendly practices and encouraging them to adopt sustainable lifestyles¹⁶⁻²⁰.
2. **Renewable Energy and Clean Transportation:** Midwives can promote the use of renewable energy sources and advocate for clean transportation options within healthcare facilities. They can also educate women about the benefits of using clean energy and transportation methods for their own health and the environment²¹⁻²³.
3. **Climate-Resilient Infrastructure:** Midwives can participate in planning and implementing climate-resilient infrastructure within healthcare settings to ensure

AFFILIATION

¹ Centre for Management Communication, Indian Institute of Management, Bangalore, India

² Midwifery Department, School of Health and Care Sciences, University of West Attica, Athens, Greece

³ Department of Midwifery, School of Health and Care Sciences, University of West Attica, Athens, Greece

CORRESPONDENCE TO

Victoria Vivilaki, Department of Midwifery, School of Health and Care Sciences, University of West Attica, Agiou Spiridonos 28, Egaleo, 12243, Athens, Greece.

E-mail: vvivilaki@uniwa.gr

ORCID iD: <https://orcid.org/0000-0002-7111-481X>

KEYWORDS

midwifery, climate crisis, advocacy, sustainability, environmental health, community education

Received: 26 March 2024

Accepted: 1 May 2024

that facilities are prepared for extreme weather events. They can also educate women about the importance of accessing healthcare facilities that are resilient to climate change impacts²⁴⁻²⁸.

4. Water and Food Security: Midwives can advocate for improved water and food security measures to reduce malnutrition and related health problems among pregnant women and children. They can provide education on nutrition and promote sustainable farming practices within communities²⁹⁻³⁰.
5. Strengthening Healthcare Systems: Midwives play a crucial role in strengthening healthcare systems to better respond to climate-related health risks, including infectious diseases and mental health issues. They can advocate for increased resources and support for healthcare facilities and provide training on climate-related health risks to healthcare providers³¹.
6. Promoting Sustainable Lifestyles: Midwives can promote sustainable lifestyles by educating women about the health impacts of the climate crisis and fostering behavioral changes to reduce carbon footprints. They can provide information on eco-friendly products and practices that promote health and well-being³²⁻³⁵.

The media have a critical role to play in communicating this for policy making and influencing key stakeholders. Studies have shown how newspaper coverage on this creates awareness and behavioral change for key influencers³⁶.

Overall, midwives can contribute to addressing the adverse effects of the climate crisis on human health by advocating for policies and initiatives, educating women and communities, and actively participating in efforts to build resilience and promote sustainability within healthcare systems.

REFERENCES

1. International Confederation of Midwives. ICM. Assessed March 2024. <https://internationalmidwives.org/>
2. Homer CS, Leap N, Edwards N, Sandall J. Midwifery continuity of carer in an area of high socio-economic disadvantage in London: A retrospective analysis of Albany Midwifery Practice outcomes using routine data (1997-2009). *Midwifery*. 2017;48:1-10. doi:[10.1016/j.midw.2017.02.009](https://doi.org/10.1016/j.midw.2017.02.009)
3. Renfrew MJ, McFadden A, Bastos MH, et al. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *Lancet*. 2014;384(9948):1129-1145. doi:[10.1016/S0140-6736\(14\)60789-3](https://doi.org/10.1016/S0140-6736(14)60789-3)
4. ten Hoop-Bender P, de Bernis L, Campbell J, et al. Improvement of maternal and newborn health through midwifery. *Lancet*. 2014;384(9949):1226-1235. doi:[10.1016/S0140-6736\(14\)60930-2](https://doi.org/10.1016/S0140-6736(14)60930-2)
5. Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus other models of care for childbearing women. *Cochrane Database Syst Rev*. 2016;4(4):CD004667. doi:[10.1002/14651858.CD004667.pub5](https://doi.org/10.1002/14651858.CD004667.pub5)
6. Homer CS, Friberg IK, Dias MA, et al. The projected effect of scaling up midwifery. *Lancet*. 2014;384(9948):1146-1157. doi:[10.1016/S0140-6736\(14\)60790-X](https://doi.org/10.1016/S0140-6736(14)60790-X)
7. Bohren MA, Vogel JP, Hunter EC, et al. The Mistreatment of Women during Childbirth in Health Facilities Globally: A Mixed-Methods Systematic Review. *PLoS Med*. 2015;12(6):e1001847. doi:[10.1371/journal.pmed.1001847](https://doi.org/10.1371/journal.pmed.1001847)
8. Watts N, Amann M, Ayeb-Karlsson S, et al. The Lancet Countdown on health and climate change: from 25 years of inaction to a global transformation for public health. *Lancet*. 2018;391(10120):581-630. doi:[10.1016/S0140-6736\(17\)32464-9](https://doi.org/10.1016/S0140-6736(17)32464-9)
9. Campbell-Lendrum D, Neville T, Schweizer C, Neira M. Climate change and health: three grand challenges. *Nat Med*. 2023;29(7):1631-1638. doi:[10.1038/s41591-023-02438-w](https://doi.org/10.1038/s41591-023-02438-w)
10. Anwar A, Anwar S, Ayub M, et al. Climate Change and Infectious Diseases: Evidence from Highly Vulnerable Countries. *Iran J Public Health*. 2019;48(12):2187-2195.
11. McKinnon S, Breakey S, Fanuele JR, et al. Roles of health professionals in addressing health consequences of climate change in interprofessional education: A scoping review. *J Clim Chang Health*. 2022;5:100086. doi:[10.1016/j.joclim.2021.100086](https://doi.org/10.1016/j.joclim.2021.100086)
12. Lokmic-Tomkins Z, Nayna Schwerdtle P, Armstrong F. Engaging with our responsibility to protect health from climate change. *J Adv Nurs*. 2023;79(6):e41-e44. doi:[10.1111/jan.15508](https://doi.org/10.1111/jan.15508)
13. Rosa WE, Catton H, Davidson PM, et al. Nurses and Midwives as Global Partners to Achieve the Sustainable Development Goals in the Anthropocene. *J Nurs Scholarsh*. 2021;53(5):552-560. doi:[10.1111/jnu.12672](https://doi.org/10.1111/jnu.12672)
14. Levett-Jones T, Bonnamy J, Fields L, et al. Promoting sustainability in nursing and midwifery clinical laboratories: Strategies for resource reduction, reuse, and recycling. *Nurse Educ Today*. 2024;134:106105. doi:[10.1016/j.nedt.2024.106105](https://doi.org/10.1016/j.nedt.2024.106105)
15. Anderson R, Zaman SB, Limmer M. The Impact of Introducing Midwives and also Mentoring on the Quality of Sexual, Reproductive, Maternal, Newborn, and Adolescent Health Services in Low- and Middle-Income Countries: An Integrative Review Protocol. *Methods Protoc*. 2023;6(3):48. doi:[10.3390/mps6030048](https://doi.org/10.3390/mps6030048)
16. The UNICEF Sustainability and Climate Change Action Plan: Executive Summary. UNICEF; 2023. Assessed March 2024. <https://www.unicef.org/media/148816/file/UNICEF%20SCAP%202023-2030.pdf>
17. Vasilevski V, Huynh J, Whitehead A, Noble C, Machado C, Sweet L. The Green Maternity project: A midwife-led initiative to promote correct waste segregation on an Australian postnatal ward. *J Adv Nurs*. doi:[10.1111/jan.15789](https://doi.org/10.1111/jan.15789)
18. Davies L, Daellenbach R, Kensington M. Sustainability, Midwifery and Birth. 2nd ed. Routledge; 2021. doi:[10.4324/9780429290558](https://doi.org/10.4324/9780429290558)

19. Owusu-Addo E. Midwives' perceptions and experiences of health promotion practice in Ghana. *Glob Health Promot*. 2015;22(3):4-14. doi:[10.1177/1757975914543574](https://doi.org/10.1177/1757975914543574)
20. Rosa WE, Kurth AE, Sullivan-Marx E, et al. Nursing and midwifery advocacy to lead the United Nations Sustainable Development Agenda. *Nurs Outlook*. 2019;67(6):628-641. doi:[10.1016/j.outlook.2019.06.013](https://doi.org/10.1016/j.outlook.2019.06.013)
21. Li F, Chandio AA, Duan Y, Zang D. How Does Clean Energy Consumption Affect Women's Health: New Insights from China. *Int J Environ Res Public Health*. 2022;19(13):7943. doi:[10.3390/ijerph19137943](https://doi.org/10.3390/ijerph19137943)
22. World Health Organization. Strengthening quality midwifery education WHO Meeting Report July 25–26 2016. WHO; 2017. Accessed March 2024. <https://iris.who.int/bitstream/handle/10665/259278/WHO-FWC-MCA-17.12-eng.pdf>
23. Levett-Jones T, Bonnamy J, Cornish J, et al. Celebrating Australian nurses who are pioneering the response to climate change: a compilation of case studies. *Contemp Nurse*. 2024;1-13. doi:[10.1080/10376178.2024.2336230](https://doi.org/10.1080/10376178.2024.2336230)
24. Mosadeghrad AM, Isfahani P, Eslambolchi L, Zahmatkesh M, Afshari M. Strategies to strengthen a climate-resilient health system: a scoping review. *Global Health*. 2023;19(1):62. doi:[10.1186/s12992-023-00965-2](https://doi.org/10.1186/s12992-023-00965-2)
25. Corvalan C, Villalobos Prats E, Sena A, et al. Towards Climate Resilient and Environmentally Sustainable Health Care Facilities. *Int J Environ Res Public Health*. 2020;17(23):8849. doi:[10.3390/ijerph17238849](https://doi.org/10.3390/ijerph17238849)
26. Fan W, Zlatnik MG. Climate Change and Pregnancy: Risks, Mitigation, Adaptation, and Resilience. *Obstet Gynecol Surv*. 2023;78(4):223-236. doi:[10.1097/OGX.0000000000001116](https://doi.org/10.1097/OGX.0000000000001116)
27. O'Connell M, Catling C, Mintz-Woo K, Homer C. Strengthening midwifery in response to global climate change to protect maternal and newborn health. *Women Birth*. 2024;37(1):1-3. doi:[10.1016/j.wombi.2023.10.004](https://doi.org/10.1016/j.wombi.2023.10.004)
28. Lokmic-Tomkins Z, Bhandari D, Watterson J, et al. Multilevel interventions as climate change adaptation response to protect maternal and child health: a scoping review protocol. *BMJ Open*. 2023;13(7):e073960. doi:[10.1136/bmjopen-2023-073960](https://doi.org/10.1136/bmjopen-2023-073960)
29. Toquinto SM, Berglas NF, McLemore MR, Delgado A, Roberts SCM. Pregnant Women's Acceptability of Alcohol, Tobacco, and Drug Use Screening and Willingness to Disclose Use in Prenatal Care. *Womens Health Issues*. 2020;30(5):345-352. doi:[10.1016/j.whi.2020.05.004](https://doi.org/10.1016/j.whi.2020.05.004)
30. Urgell-Lahuerta C, Carrillo-Álvarez E, Salinas-Roca B. Interventions on Food Security and Water Uses for Improving Nutritional Status of Pregnant Women and Children Younger Than Five Years in Low-Middle Income Countries: A Systematic Review. *Int J Environ Res Public Health*. 2021;18(9):4799. doi:[10.3390/ijerph18094799](https://doi.org/10.3390/ijerph18094799)
31. Lugten E, Hariharan N. Strengthening Health Systems for Climate Adaptation and Health Security: Key Considerations for Policy and Programming. *Health Secur*. 2022;20(5):435-439. doi:[10.1089/hs.2022.0050](https://doi.org/10.1089/hs.2022.0050)
32. Bahri Khomami M, Walker R, Kilpatrick M, de Jersey S, Skouteris H, Moran LJ. The role of midwives and obstetrical nurses in the promotion of healthy lifestyle during pregnancy. *Ther Adv Reprod Health*. 2021;15:26334941211031866. doi:[10.1177/26334941211031866](https://doi.org/10.1177/26334941211031866)
33. Vivilaki VG, Asimaki E. Respectful midwifery care during the COVID-19 pandemic. *Eur J Midwifery*. 2020;4(April):1-2. doi:[10.18332/ejm/120070](https://doi.org/10.18332/ejm/120070)
34. Vivilaki VG, Diamanti A, Tzeli M, et al. Exposure to active and passive smoking among Greek pregnant women. *Tob Induc Dis*. 2016;14:12. doi:[10.1186/s12971-016-0077-8](https://doi.org/10.1186/s12971-016-0077-8)
35. Richardson J, Grose J, Bradbury M, Kelsey J. Developing awareness of sustainability in nursing and midwifery using a scenario-based approach: Evidence from a pre and post educational intervention study. *Nurse Educ Today*. 2017;54:51-55. doi:[10.1016/j.nedt.2017.04.022](https://doi.org/10.1016/j.nedt.2017.04.022)
36. Ganapathy D. *Media and Climate: Making Sense of Press Narratives*. Routledge; 2021. doi:[10.4324/9781003015673](https://doi.org/10.4324/9781003015673)

CONFLICTS OF INTEREST

The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none was reported.

FUNDING

There was no source of funding for this research.

ETHICAL APPROVAL AND INFORMED CONSENT

Ethical approval and informed consent were not required for this study.

DATA AVAILABILITY

Data sharing is not applicable to this article as no new data were created.

PROVENANCE AND PEER REVIEW

Not commissioned; internally peer reviewed.

DISCLAIMER

The views and opinions expressed in this article are those of the authors.