Perspectives



Palliative Justice Post-COP27

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The climate crisis is a planetary existential threat, disproportionately affecting the poorest populations worldwide. People in low- and middle-income countries (LMICs) experience the most detrimental consequences of climate injustice, endangering their livelihoods, safety, overall wellbeing, and survival. Although the 2022 United Nations Climate Change Conference (COP27) put forth several internationally salient recommendations, the outcomes fall short to efficiently tackle the suffering that exists at the intersection of social and climate injustice. Individuals with serious illness living in LMICs have the highest burden of health-related suffering globally. In fact, more than 61 million people experience serious health-related suffering (SHS) each year that is amenable to palliative care. Despite this well-documented burden of SHS, an estimated 88-90% of palliative care need is unmet, the majority in LMICs. To equitably address suffering at individual, population, and planetary levels in LMICs, a palliative justice approach is crucial. The interplay of human and planetary suffering requires that current planetary health recommendations be expanded to incorporate a whole-person and whole-people perspective that recognizes the need for environmentally conscious and community-based research and policy initiatives. Conversely, palliative care efforts should incorporate planetary health considerations to ensure sustainability in capacity building and service provision. In sum, the optimal health of the planet will remain elusive until we can holistically recognize the value of relieving all suffering due to life-limiting conditions, as well as the value in preserving the natural resources of countries in which all people are born, live, age, suffer, die, and grieve.

INTRODUCTION

The Climate Crisis is an emerging catastrophe for both people and planet. The COP27 presidency at the 2022 UN Climate Change Conference launched the Sharm El-Sheikh Adaptation Agenda [1] and a breakthrough agreement providing loss and damage funding for at-risk nations most impacted by climate disasters was reached [2]. Although promising, COP27 fell short in tackling the broader holistic and preventive steps needed to bolster planetary health while also equitably alleviat-

ing human suffering.

Palliative care is "the active holistic care of individuals across all ages with serious health-related suffering [SHS] due to severe illness, and especially of those near the end of life. It aims to improve the quality of life of patients, their families and their caregivers [3]." People living in low- and middle-income countries (LMICs) have the highest proportion of unrelieved SHS due to life-limiting illness and injury that is amenable to palliative care [4,5]. Thus, the world's poorest populations with SHS

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Abbreviations: LMICs, low- and middle-income countries; COP27, 2022 United Nations Climate Change Conference; SHS, serious health-related suffering; IPLCs, Indigenous peoples and local communities.

Keywords: palliative care, justice, climate crisis, serious illness disparities, controlled essential medicines, serious health-related suffering, health equity, planetary health

Author Contributions: WER: Conceptualization, Writing-Original Draft, Writing-Review & Editing; LG: Conceptualization, Writing-Original Draft, Writing-Review & Editing.

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experience the cumulative hazards of both palliative and climate injustice: a planetary and public health emergency exacerbating the drivers of illness, and simultaneously putting the sickest and most vulnerable in harm's direct path. A true planetary health approach to global healing requires innovative approaches to inclusive healthcare for people and their environs, strategically tackling the social determinants of inequity, and holding leaders and institutions to account for governance failures [6]. In short, planetary health requires palliative justice.

PALLIATIVE CARE INEQUITIES AND PALLIATIVE JUSTICE

Palliative care inequities are often ignored and overlooked, but nearly 90% of global need goes unmet [5]. Take for example Egypt—host of COP27—which has insufficient availability of opioids to manage pain and limited palliative care services in relation to population size [5]. Patients living in rural areas are often without access to palliative trained clinicians or dispensaries carrying morphine to treat moderate to severe pain [7]. These scarcities of essential resources and facilities are augmented by climate impacts (eg, extreme weather, increased dust and sea storms), thus fortifying the barriers to the humane relief of suffering. Another example is the June 2022 flooding in Bangladesh, which impacted roughly 7.2 million people [8], destroying land, farms, homesteads, and health services while increasing SHS and social isolation. Those too ill to move, were displaced. Those living with serious illnesses, such as advanced cancers, were separated from loved ones. And those dependent on pain and symptom relieving medications went without.

The impacts of climate change are directly linked with disproportionately detrimental health outcomes for populations in LMICs. For instance, there are noted associations in LMICs between climate change and tuberculosis risk factors (eg, overcrowding, poverty, diabetes, undernutrition) [9] and climate-related disasters and mental health challenges (eg, storm-related post-traumatic stress disorder, flood-related depression) [10]. Evolving climate disasters will also increase migration health crises, leading to greater health risks and barriers to health and social wellbeing while living in or being forcibly displaced to LMICs [11].

What is happening across the continent of Africa amplifies the intersection of planetary and human suffering. Climate change is a "threat multiplier" for many diseases that have disproportionately high prevalence in Africa (eg, neglected tropical disease) [12]. Africa accounts for 90% of the global malaria burden and of the 10 African countries with the greatest malaria prevalence, seven are also most susceptible to the impacts of climate change [13]. Africa also accounts for about one-fifth of the

world's adult palliative care need (77% due to HIV) and roughly 52% of children's palliative care need (mostly due to progressive non-malignant conditions) [5]. While some countries in Africa, such as Uganda, have demonstrated government investments in workforce training and practice regulations to increase palliative care access to those with SHS, many lack the necessary pathways or policies to sustainably deliver palliative care [4]. For example, using a ratio of SHS to distributed opioid morphine-equivalent distribution as a proxy for estimated palliative care access, Nigeria is only able to meet 0.2% of annual national level need for about 3.6 million decedent and non-decedent patients with SHS [4].

While the burden of injustices faced by those in LMICs with SHS are not limited to palliative and climate inequities, understanding how adverse climate events impact suffering in these settings of unique vulnerability, and recognizing how palliative injustices can signal the drivers of climate change provides a fresh perspective. COP27 pointed to solutions in the form of technical assistance, funding packages, and novel banking investment initiatives. However, the youth-led COP27 Climate Forum and the Global Climate Action Space pointed out that that the mobilization of finances, while essential, is not enough [2].

Many of the solutions to achieve palliative justice including accessible and affordable palliative care medications and services for all people with SHS—lie in the richness of community partnerships, community-building, and community-based research and practices. The solutions for the climate crisis also lie in a collective community response, and like palliative care, Africa can provide can provide global leadership on novel responses. The Intergovernmental Panel on Climate Change has emphasized the need to partner with Indigenous peoples and local communities' (IPLCs') leadership [14]. In fact, roughly 80% of the planet's current biodiversity and 17% of the world's forest carbon come from IPLC lands, which tend to have lower deforestation rates when compared to government protected domains [14]. This need for community orientation is echoed in The Lancet Commission on the Value of Death report [15], emphasizing that, despite humanity's delusions of separateness, we are indeed, an intimate part of nature. Furthermore, they recognize the vast multi-factor changes needed to support communities in "reclaiming death, dying and grief as social concerns" and envision a scenario where both planetary wellbeing and end-of-life care become more equal (eg, universal palliative care and pain relief for all as the climate crisis calls attention to global interdependence) [15]. Achieving such a vision of community-oriented health will require ongoing system-level assessment of resource utilization by health systems and governments, shifting to clean energy resources and decreasing waste

Table 1. Planetary Health Informed Propositions for Palliative Justice

Understanding that a palliative care approach inherently assumes a holistic lens on patient, family, and community, as well as environmental and social factors that inform the health, illness, living, and dying experience:

- Use a whole-person, whole-society approach that employs palliative care principles to simultaneously improve
 quality of life and alleviate suffering during serious illness and at end-of-life throughout climate emergencies
 and natural disaster management
- Empathic and person-centered communication is the foundation of palliative care; integrate evidence-based communication techniques at all levels of care to identify patient, family, and community needs, preferences, core values, and goals to ensure care plans align with their personal and planetary worldviews
- Use community-based participatory research methods to ensure integrated palliative care as a component
 of universal health coverage is people-centered and beneficial to community stakeholders affiliated with both
 environmental health and healthcare efforts
- Adopt implementation science designs to prioritize environmentally conscious approaches that effectively alleviate SHS while accounting for both natural and health system resources
- Integrate data registries of population and national-level SHS burdens and distributed opioid morphineequivalent access for palliative care interventions into broader data collection approaches, forging an understanding of environmental and human suffering to inform unified and interdisciplinary solutions
- Use evidence-based advocacy to inform decision-makers to better understand the urgencies of securing the wellbeing of those with SHS and their families in the face of climate disasters and planetary health decline
- Increase the visibility of systematically marginalized peoples who suffer multiple resource constraints in LMICs, such as climate injustice, poor access to palliative care and controlled essential medicines (eg, opioids), and governmentally endorsed discrimination
- Re-center the needs and lived experiences of marginalized groups in the setting of SHS to ensure all are heard, seen, and elevated to decision-making roles while strategizing climate health planning and implementation
- Leverage partnerships with palliative care advocates who are locally-based and well-positioned to collaborate with decision-makers and serve as intermediaries between public interest and multi-sector climate priorities

where possible, uplifting the role and involvement of communities in end-of-life care delivery where safe and appropriate, and engaging faith and local communities in serious illness decision-making to ensure that care aligns with cultural values.

Community-based participatory research methods can assist in responsibly exploring population needs in LMICs [16,17]—helping to achieve community-based goals while partnering with local leaders and stakeholders and leveraging community strengths while accounting for vulnerabilities associated with climate changes. By integrating community needs regarding climate in the context of life-limiting conditions, investigative teams can clarify aims and programs of research to promote holistic care in its highest sense, inclusive not only of biopsychosocial considerations but also environmental and climate concerns. With such an approach, palliation extends to the community itself as a living, breathing participant in research planning for those with serious illness and those who care for them.

CONCLUSION AND RECOMMENDATIONS

As human-induced planetary warming continues to escalate, experts estimate that the global burden of SHS will increase nearly 90% over the next four decades, with LMICs experiencing the highest burdens [18]. The interplay of planetary and human suffering calls for an ex-

pansion of previous planetary health recommendations to include palliative care considerations with a whole-life, whole-people lens [6]. Table 1 provides a selection of key propositions derived from The Rockefeller Foundation-*Lancet* Commission on Planetary Health addressing imagination, research and information challenges, and governance failures [6]. The health of the planet will remain elusive until we can holistically recognize the value of relieving all suffering due to life-limiting conditions, as well as the value in preserving the natural resources of countries in which all people are born, live, age, suffer, die, and grieve.

Evidence-based advocacy efforts will be essential to engage decision-makers at all levels of governance and civil society in environmental, public health, and social care sectors [7,19,20]. Advocacy is key to conveying the economic value of palliative care in reducing avoidable spending, mitigating disparities in service access, and improving clinical outcomes aligned with patient, family, and community goals of care. Ultimately, robust and sustainable palliative care development requires planetary considerations to consistently improve outcomes (Table 1). But planetary health without palliative justice is an incomplete equation with disastrous consequences.

Declaration of Competing Interests: WER has received funding unrelated to this manuscript from Cambia Health Foundation, Robert Wood Johnson Foundation, and The

Rita and Alex Hillman Foundation. WER acknowledges the NCI/NIH award number P30CA008748.

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