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Women and planetary health in Asia-Pacific

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In the face of climate change, women's preconceived vulnerability and virtuousness often deflect focus from gender inequality in decision-making and leadership. Within environmental, political, and social crises, women are capable and proficient leaders who are pivotal to climate change action and are already inspiring social change in innovative ways. This article presents examples of women-led environment movements in the Asia-Pacific that challenge the patriarchal notions that women must be rescued rather than actively participate in their salvation. Historically, strategies have been centered on eco-conscious activism and organized protests. As climate change effects become more evident, engagement has transformed into emergency response and preparedness, with women's groups shepherding and leveraging through healthcare settings and grassroots and community networks. The way forward is to urge meaningful policy actions to support women as effective planetary stewards and campaigners against environmental challenges. This will be achieved through funding mechanisms, gender-inclusive representation mentorships, and pathways that transcend political boundaries.

KEYWORDS

planetary health, Asia-Pacific, women leadership, gender-based actions, sustainable healthcare, climate action

Introduction

Asia-Pacific is a highly vulnerable region experiencing social, political, and economic instability, characterized by low-lying and coastal megacities (Miller, 2019). The release of the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report on Impacts, Adaptation, and Vulnerability highlighted the projected sobering impacts of climate change, but the most concerning aspect is the projected increase in the intensity and frequency of extreme weather events and climate-driven disease outbreaks (Pörtner et al., 2022). The Asia-Pacific region is likely to have the world's first climate refugees, with climate displacement and resettlement already occurring in Fiji, Vanuatu, and the Solomon Islands. In 2019, Southeast and East Asia observed 9.6 million internal displacements due to climate-induced disasters (Lawrence et al., 2022; Shaw et al., 2022). Record-breaking climate events coupled with the unprecedented COVID-19 pandemic have been particularly hard on women (Wenham et al., 2020; Smith et al., 2021). These exogenous shocks add another layer of complexity to the underlying gender inequality already present in the region and challenge us to better prepare and adapt in a way that supports women's rights (McGill, 2018).

While women are extremely vulnerable, they are also beacons of potential and leaders of change (REF). The United Nations 2022 International Women's Day highlighted women and girls around the world who are leading the change in climate change adaptation, mitigation,

and response, to build a more sustainable future for all (UN Women, 2022). In addition, a growing body of research advocated against gender-neutral approaches and identified the disproportionate and invisible burden and leadership potential of women and girls facing the climate crisis. This article will explore women-led environmental movements in the Asia-Pacific region in order to retell the narrative of the unique role women play in galvanizing changes that can help shape future planetary health actions, rather than simply portraying women as victims.

Women's rights and risks

Although everyone is exposed to intensified extreme weather events and record-breaking global temperatures, the risks and responses to risks are not the same for everyone. As global catastrophes become more frequent and deadly because of climate change, attention is usually focused on the broad disruptions to people's lives. This silences the unique trauma women suffer, such as the link seen between environmental change and gender-based violence (van Daalen et al., 2022). Furthermore, a study on South Asian women seeking refuge in evacuation shelters after a disaster found that inadequacies in gender-specific relief led to an increase in urinary tract infections, maternal mortality, and sexual assaults (Chowdhury et al., 2019). As disasters cause disruptions to economic and social stability, women have a double burden of vulnerability caused by socially constructed stigma and inequality (Wenham et al., 2020; Gan et al., 2021; van Daalen et al., 2022).

Environmental crises such as climate change elevate health vulnerability, especially mental health risks, leading to emotions such as anxiety, depression, and helplessness. Patrick et al. (2022)'s study on nationwide survey in Australia on the impact of climate change on mental health identified the population groups that are most at risk of climate-related mental health issues. According to this study, climate change-related mental health issues disproportionately affect women, young people, those from disadvantaged regions, and those who have experienced climate change-related extreme events. Evidently, women were more affected by pre- (17.42%) and post-traumatic (27.53%) stress as a result of climate change impacts on their mental health. Feminist Participatory Action Research (Chakma, 2016) is a conceptual framework that recognizes the specific vulnerability and crisis that women experience in relation to climate change. Especially low-income and indigenous women are dealing with the greatest impacts of climate change, despite being the least responsible for it.

As climate change pushes multiple parts of the earth's systems into irreversible, abrupt, and radical change, it necessitates the inclusive engagement from diverse gender representations in effective crisis prevention and disaster preparedness (Bishu et al., 2021; Farhall et al., 2022). Women-based grassroots research into climate action illustrates that women from the Asia-Pacific region, the region home to more than half of the world's population, are suffering disproportionately and that there is a need for more involvement in climate change research and action that focuses on their local experience

(Chakma, 2016). Especially indigenous women have a unique role to play as they have a deep connection with nature and often take on the role of custodians, revealing that more diverse voices within women's advocacy are needed for comprehensive climate change adaptation and mitigation (Whyte, 2014).

From acquiescence to resistance

Most societies in Asia and the Pacific are patriarchal, where men are given more respect and power, and obeying those with high status is highly valued. The social construct system restricts women's engagement in decision-making processes, and they are often seen as submissive. Statistics on women in leadership positions in politics and the gender pay gap display objective realities that hinder equality in all parts of society. This lack of structural power is often translated as women having no political voice; however, history has shown us that women leaders seek unconventional pathways to demand and ignite change to protect and restore the integrity of the environment.

Historically, grassroots movements raised awareness of the root causes of environmental health issues and attempted to build momentum for change. For example, in Japan, in the 1960s, many social movements spearheaded by women were strongly influenced by their roles as mothers to protest against nuclear power or harmful food additives (Eto, 2005). A year after the Fukushima nuclear disaster, Japanese women in New York City gathered for a protest, which they named "Pregnant With Fear of Radiation" (Yanagiwara, 2018). Protestors engaged in a variety of demonstrations, from marches and rallies to occupations and civil disobedience, in order to draw attention to the risks of radiation exposure. In addition to calling for the immediate closure of nuclear power plants, they urged for the adoption of stringent regulations to ensure that the remaining plants are operated in a safe and responsible manner.

Contemporary women's climate-action organizations including the Climate Women's Congress and Women Leaders for Planetary Health (de Paula et al., 2021) served as examples of how citizens can be instrumental in bringing attention and change through funding mechanisms, key performance indicators, as well as future-directed environmental planning and conservation. For example, in the Philippines, through the leadership of Sister Arcelita Sarnillo, who is a hospital administrator of St. Paul's Hospital in Iloilo, a green, sustainable, and climate-resilient healthcare transformation is in progress. The hospital initiatives prioritized both people's health and the environment to fight against COVID-19. For example, they developed reusable personal protective equipment (PPE) using washable cloths; replaced hazardous cleaning products containing sodium hypochlorite with organic materials such as vinegar; used autoclaving to disinfect hazardous waste, rather than burning; and reduced plastic water bottles by installing water dispensers in the hospital hallways. In the words of Sister Sarnillo, "From the very beginning of our COVID-response, it was clear to us that as frontliners we did not need to choose between the health of human beings and the environment. We can always prioritize both."

Women's role in safeguarding the future

As seen with historical movements, women's unique role as primary caregivers has the potential to increase climate change awareness in the next generation and activism (Cousins, 2021). For example, in Pacific Island fishing villages, women are becoming ocean custodians, teaching their children sustainable fishing practices and how to protect the local marine ecosystem (Ram-Bidesi, 2015; UNEP, 2017). Another example is the women in the Barangay Industrial Valley Complex Marikina community, led by the local teachers of Batibot Early Learning Center, organized themselves and formed a task force to educate their community about the root causes of flooding and other climate-related disasters and at the same time, ways on how to protect their environment and their community. Women's leadership in disaster management is also exemplified in small island developing states that are very remote and exposed to environmental hazards (Oliva, 2020).

In addition to this, there is a need for gender-inclusive interventions, such as the Gender Disaster Network (2005)'s Six Principles for Engendered Relief and Reconstruction challenges traditional mainstream gender-neutral approaches to disaster recovery. The Disaster-Resilient Village Programme in Indonesia (Oktari et al., 2021) also showcases how a gender lens helped to identify explicit gendered needs and impacts in disaster management. FemLINK Pacific's (2019) Women's Weather Watch (WWW) of Fiji recognizes the need for gender-inclusive disaster management that addresses women's priorities. The WWW monitors natural disasters and helps women work together to prepare before, during, and after extreme weather events to ensure the elderly, children, and disabled are safe and has slowly expanded, with partnerships now in Vanuatu and the Solomon Islands (FemLINK Pacific, 2019).

Notable religious-based organization founding members of Tzu Chi Foundation in Taiwan, a faith-based not-for-profit organization included 30 housewives saving 50 cents a day to contribute to help the needy. In the early 90s, the volunteers started to promote household recycling and plant-based diet to reduce their own carbon footprint and cultivate harmonious relationships with all physical, social, and spiritual environments. The recycled plastic bottles are reproduced blankets and equipment to be used during disaster relief.

Achieving gender-just, economic equality, and the battle to protect our planet are intertwined. Women's markets for change build community resilience and bring structural changes beyond propaganda. The UN's Markets for Change (M4C) of Vanuatu, has illustrated that supporting women to participate in the local economy, gives them the confidence to create positive change in the community; when women step out of traditional household roles,

they find their voice and become local leaders (UN Women, 2016). The local marketplace has become an entry point for women to increase their resilience to climate change, women's markets have evolved into a place of gender-inclusive social connectedness that is increasing local agency and adaptive capacity (McNamara et al., 2020).

Conclusion

Evidence shows that Asia-Pacific's vulnerability to environmental threats is profoundly gendered in its effects which urges for a gender-inclusive response. Women leaders in the Asia-Pacific are at the cutting edge of efforts leveraging informal avenues to address planetary health threats and climate-driven extreme events. The intention is not to paint pictures of women as being superhumans but to shed light on plausible futures for us to tackle the planetary emergency.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

Conceptualization: CG and BS. Writing—original draft preparation: CG, CM, and PO. Writing be directed to the CM, HG, PO, and BS. All authors have read and agreed to the final version of the manuscript.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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