Climate Change and Health: Unravelling Gendered Impacts for Equitable Resilience

Sananda Mukherjee
Assistant Professor, School of Mass Communication,
KIIT Deemed University, Bhubaneswar, Odisha, India
sananda.mukherjeefmc@kiit.ac.in

Chinmoyee Deka
Research Scholar, School of Social Sciences,
TISS, Guwahati, Assam, India
chinmoyee.deka123@gmail.com

ABSTRACT

Climate change will profoundly impact global health, putting billions at increased risk. Earth's average surface temperature is projected to exceed the safe limit of 2°C above pre-industrial levels. Higher latitudes like northern Canada, Greenland, and Siberia may experience even greater temperature rises of 4–5°C. The report identifies significant health threats, including changing disease patterns, water, and food insecurity, vulnerable settlements, extreme weather events, and population growth and migration. While direct risks from vector-borne diseases and heatwaves are evident, the most significant health impacts are likely to result indirectly from changes in water and food availability and the frequency of extreme climatic events (Watts et al., 2018).

Despite the pressing concern for global health, the gendered dimensions of climate change's impact remain largely overlooked. This review addresses this gap by examining gender-specific health impacts and underlying socio-cultural factors exacerbating vulnerability. It highlights disparities in women's and men's health outcomes concerning food security, water and sanitation, vector-borne diseases, mental health, and reproductive health. Synthesizing evidence from diverse regions and case studies reveals distinct vulnerabilities faced by women.

'Intersectionality' is now a crucial aspect of feminist scholarship, driving extensive research and academic engagement, revolutionizing feminist and gender studies since the late 1980s (Salem, 2018). Guided by feminist theory, the review analyzes climate change and health impacts through a gendered lens, revealing disparities in nutrition, access to clean water, and mental health risks women face, especially in disaster-prone regions. Gender-inclusive mental health interventions are essential during and after climate-related disasters.

The review highlights climate-induced disruptions to reproductive health services, increasing maternal mortality rates in vulnerable regions. The feminist theory prioritizes family planning and reproductive health in climate-resilience strategies to protect women's rights and well-being. Promising gender-responsive climate policies empower women as change agents, leading to effective resilience measures and sustainable solutions. Integrating gender-specific data collection is crucial to address women's unique vulnerabilities.

In conclusion, this review underscores the critical importance of recognizing the gendered impacts of climate change on health. Integrating gender perspectives into climate change policies is essential to achieve equitable health outcomes and enhance overall resilience. Guided by the feminist theory, we call for concerted efforts at local, national, and global levels to prioritize gender-responsive climate policies, thereby promoting the health and well-being of all and fostering a more sustainable and just future.

Keywords-Climate Change, Health, Gender, Feminist, Equitable

I.PROLOGUE

In the face of mounting evidence regarding the far-reaching implications of climate change on global health, the call for action has never been more urgent. As Earth's climate continues to evolve, so do the health risks it poses to billions of people worldwide. To effectively address this pressing challenge, transformative advocacy, and public health movement is imperative, bringing together governments, international agencies, NGOs, communities, and multidisciplinary academics. This collaborative endeavor seeks to swiftly adapt to the profound effects of climate change on human health and forge a resilient path toward a healthier and more sustainable future (Watts et al., 2018). The increasing frequency and intensity of extreme weather events, rising temperatures, changing disease patterns, and water and food insecurity pose significant risks to populations worldwide. As the scientific community and policymakers focus on devising strategies to mitigate the impacts of climate change on health, it is crucial to recognize

that these effects are not evenly distributed across societies. The gendered dimensions of climate change and their potential ramifications on health have been largely overlooked, pointing to an important gap in the current discourse. The acknowledgment from governments and the public that climate change profoundly impacts health can catalyze advocacy and political action. This awareness is crucial in addressing both mitigation efforts and adaptation strategies to combat the challenges posed by climate change on health effectively (Watts et al., 2018).

Climate change's health consequences are severe, with approximately 7 million premature deaths annually due to air pollution. Increased temperatures directly contribute to heat stress and cardiovascular-related deaths. Extreme weather events lead to fatalities, injuries, clean water and sanitation disruptions, trauma, mental health disorders, and ecological grief. Moreover, disease-transmitting vectors, like dengue, are shifting into regions previously unaffected. The impact of climate change on health is overwhelmingly negative and varies across genders. Recognizing and addressing these gender-specific disparities is vital for comprehensive and equitable climate change mitigation and adaptation strategies (Daalen et al., 2020).

Moreover, addressing the impacts of climate change necessitates a profound transformation in how individuals lead their daily lives. Scholarly sources widely concur that the effects of this environmental challenge will disproportionately affect women in developing countries due to prevailing gender disparities. It is also argued that these climate-related hardships will further magnify existing gender inequalities (Mainlay & Tan, 2012). This review aims to address this gap by delving into the gender-specific health impacts of climate change and exploring the underlying socio-cultural factors that exacerbate vulnerability. Drawing upon a comprehensive analysis of existing literature, this study endeavors to comprehend the intersection of climate change, gender, and health, guided by feminist theory.

'Intersectionality' has become crucial in feminist scholarship since the late 1980s, leading to extensive research and academic involvement. This has revolutionized feminist and gender studies, as evident in Salem's work (2018). A feminist lens is applied in this review to examine the health effects of climate change, exposing disparities in nutrition, access to clean water, and mental health risks women face, particularly in disaster-prone areas. Understanding the social, economic, and political inequalities between genders is a central focus of feminist theory, revealing how they influence individual experiences and societal vulnerabilities. Consequently, gender-inclusive mental health interventions are highlighted as necessary during and after climate-related disasters, recognizing the distinct emotional and psychological toll on women.

Climate change significantly impacts reproductive health, increasing maternal mortality rates in vulnerable regions. Guided by feminist theory, the review stresses the importance of prioritizing family planning and reproductive health services in climate-resilience strategies. Protecting women's reproductive rights and well-being is vital to developing effective policies. Notwithstanding the challenges of climate change, the review showcases promising gender-responsive climate policies that empower women as agents of change. Success stories are highlighted, demonstrating how women's involvement in decision-making leads to more effective climate resilience measures and sustainable solutions. The significance of feminist theory is underscored in integrating gender-specific data collection and analysis into climate research, enabling targeted interventions to address women's unique vulnerabilities.

In conclusion, the review emphasizes the critical importance of recognizing the gendered impacts of climate change on health. Integrating gender perspectives into climate change policies is essential to achieve equitable health outcomes and enhance overall local, national, and global resilience.

II. FEMINIST THEORY AND INTERSECTIONALITY

Intersectionality is rooted in critical feminist theory and offers significant advantages in understanding climate change's impact on individuals and groups within different power structures based on dynamic social categorizations. Intersectionality helps avoid essentialization, fostering solidarity and agency beyond rigid social categories. It illuminates how power structures and categorizations are reinforced, challenged, and renegotiated in the context of climate change. Intersectionality, as a tool for critical thinking, raises crucial questions for analyzing climate change through diverse lenses. It emerged within feminist theory, emphasizing power dynamics and knowledge production (Kaijser & Kronsell, 2013). It explores the interaction of gender, race, class, sexuality, and other social categories in shaping individuals' lives, social practices, institutions, and ideologies, influencing power dynamics (Djoudi et al., 2016).

The concept of intersectionality is not new, as feminist studies and activism have long linked gender with other forms of domination. Kim Crenshaw first used it in 1991 to criticize the mainstream feminism movement dominated by white middle-class females (Kaijser & Kronsell, 2013). By recognizing social categories as constructed and dynamic, intersectionality acknowledges that they interact and co-create unique social positions across time and place. It highlights the relational nature of power, where individuals can experience oppression and

privilege simultaneously. Intersectionality rejects "Oppression Olympics," the competition among different groups for the title of most oppressed for access to resources and amenities, by advocating for a more nuanced analysis of power, including power with others rather than solely power over others. It seeks to understand and address the root causes of power differentials rather than just treating the symptoms (Djoudi et al., 2016).

Within climate change debates, intersectionality offers a multifaceted approach to understanding power structures' impact on individuals and communities. It recognizes complex interactions between policies at various levels and their effects on social identities. Moreover, it acknowledges the potential for asymmetrical power relations between communities and in reaction to policies. Although not extensively applied in climate change research, intersectionality shows promise in addressing gender issues and promoting equitable adaptation processes. By unveiling assumptions about social categories and their relations, it helps identify explicit and implicit biases (Djoudi et al., 2016).

This review attempts to look at the health impacts of climate change through the intersectionality lens to understand better how gender, economic status, location, culture, and other social tools together influence the range and type of health impacts experienced by people. Hence, an intersectional analysis of climate change using critical feminist theory provides a robust framework for understanding diverse experiences and power dynamics that can contribute significantly to more inclusive and effective approaches to climate change research, policy, and action.

III. CLIMATE CHANGE AND HEALTH IMPACTS

All animal species, including humans, rely on access to food and water, protection from infectious diseases, and the stability of the climate for their well-being. The global climate system plays a vital role in sustaining life on Earth. As the climate changes, these essential conditions will likely be affected, profoundly impacting human health and overall well-being. According to the United Nations' IPCC Third Assessment Report, climate change is expected to pose increased risks to human health (Majra & Gur, 2009). Climate change will significantly impact critical aspects of health, such as food, air, and water, with extreme weather events like storms, heat waves, droughts, and floods becoming more frequent and severe. Developing countries, particularly those with vulnerable populations, will be the most affected. However, the health risks caused by climate change are global and challenging to reverse. In the South-East Asia Region, recent climate changes have had diverse impacts on health, disproportionately affecting the most vulnerable, such as the young, elderly, and medically frail. Low-income countries with widespread malnutrition, poor education, and weak infrastructures face the greatest difficulty adapting to climate change and its health hazards. Certain populations, including those on islands, mountainous regions, water-stressed areas, megacities, and coastal areas, are at higher risk (WHO, 2008).

Climate change has various health impacts, including heat stress, poor air quality, extreme weather events, and changes in vector-borne diseases, water quality, and food security. In India, climate change has widespread effects expected to worsen under future climate scenarios. The Government of India aims to sustain economic growth while reducing greenhouse gas emissions. However, economic growth measured solely by gross domestic product may not lead to sustainable human development. India ranks 127 on the United Nations Gender Inequality Index, suggesting that an economic growth plan lacking gender considerations could exacerbate existing gender disparities. India is facing increased extreme precipitation and decreased seasonal rainfall, leading to prolonged periods of drought. This has significant implications for crop, livestock, and fishery yields, resulting in food insecurity and economic instability. Many regions in India are already water-stressed due to excessive groundwater consumption for irrigation and industrial purposes, particularly in Rajasthan, Punjab, and Haryana. This is posing a threat to the country's food security. Water-borne diseases pose a significant burden in India, but accurate quantification is challenging due to reporting gaps and limited surveillance. Access to improved sanitation is relatively low, with only 62% of urban and 28% of rural communities having such facilities. Changes in temperature and precipitation alter the distribution and abundance of disease-carrying vectors, exposing more people to illnesses transmitted by ticks and mosquitoes. Several endemic vector-borne diseases (VBDs) in India include Malaria, Dengue, Chikungunya, and Japanese Encephalitis (Corensen et al., 2018).

Numerous scientific assessments have highlighted the significant impact of climate change on human health and well-being. Taking action to mitigate climate change has been found to have positive effects on public health. These findings have concluded that climate change is the greatest global health threat and the most substantial global health opportunity of the 21st century (Kotcher et al., 2021). Hence, mitigation strategies to combat climate change can lead to immediate health benefits. For instance, reducing coal-fired power generation and promoting mass transport can lower air pollution and related respiratory diseases while encouraging active transport can reduce obesity rates. Addressing greenhouse gas emissions from food production and transportation will also positively impact public health (WHO, 2008). However, despite the potential benefits and challenges, many people worldwide are still unaware

of the health implications of climate change. Encouragingly, research indicates that providing information about the health risks of climate change and potential solutions can boost public support for emission reduction measures (Kotcher et al., 2021).

IV.GENDER-SPECIFIC HEALTH IMPACTS OF CLIMATE CHANGE

A. Climate Change and Mortality

Studies reviewed by the World Health Organization (2009) demonstrate that European women face higher mortality risks during heat waves, while older men in the United States are more vulnerable due to social isolation. In India, women, particularly older and pregnant women, bear more significant health impacts related to heat exposure. This discrepancy is attributed to physiological differences between women and men, wherein women exhibit reduced heat dissipation through sweating, possess higher working metabolic rates, and have thicker subcutaneous fat, which impairs radiative cooling. Moreover, cultural vulnerabilities, including limited access to healthcare and cooling facilities due to safety concerns, transportation constraints, and traditional attire that hampers evaporative cooling, contribute to women's heightened susceptibility to heat-related issues (Corensen et al., 2018).

Research studies indicate that how inhaled particles are deposited in the lungs differs between men and women, with women showing higher levels. Women are also more susceptible to cardiovascular problems, especially when exposed to fine particulate matter (PM2.5) in the air, as seen in a recent study where the thickness of arteries in women was linked to ambient PM2.5 levels, unlike in men. Evidence suggests that women might be more vulnerable to the deposition of inhaled particles in their lungs, leading to systemic hypoxia caused by lung disease-related anemia (Corensen et al., 2018).

B. **Indirect Impacts of Malnutrition on Women and Children**

Decreased agricultural productivity due to climate change will heighten malnutrition and hunger, disproportionately affecting women in Africa, Asia, Latin America, and the Caribbean, responsible for up to 80 percent of household food production. As women predominantly engage in labor-intensive subsistence agriculture, while men participate in mechanized farming, the impacts of climate change disproportionately affect women's livelihood strategies and efforts to ensure food security (Röhr, 2007). In developing countries, severe climate impacts are observed, where malnutrition indirectly exacerbates disease susceptibility among women and children (Goh, 2022).

Women possess distinct nutritional requirements compared to men and frequently encounter situations at the lower end of household food hierarchies, leading to an increased likelihood of skipping meals. Consequently, food insecurity impacts women and girls disproportionately. This leads to them having lesser access to food during disasters like the El Nino floods and landslides (Goh, 2022). Consequently, they are exposed to epidemics, such as acute respiratory and diarrheal infections, malaria, dengue, and cholera, with pregnant women facing higher risks of contracting malaria (Reyes, 2002). Declining access to traditional medicinal herbs due to changing natural resources forces communities to rely on substandard clinics for treatment (Goh, 2022).

Women are also more susceptible to food insecurity and nutritional deficiencies due to increased needs during menstruation, pregnancy, and nursing. In India, poor nutritional status and anemia are prevalent among women and children. Micronutrient deficiencies can lead to cognitive impairments, affecting attention span, memory, emotions, behavior, and sensory perception, negatively impacting educational outcomes (Corensen et al., 2018).

C. **Psychological Impacts**

Climate events have varying psychological impacts on women and men. Women in drought-affected areas experience more anxiety and emotional distress than men due to difficulties fulfilling their roles as producers and providers. Similarly, pronounced psychosocial effects of floods have been observed on women in the Ganga River basin, who face distress and loss of support networks while simultaneously caring for family members (Goh, 2022). Studies indicate that in high-income nations, men and boys are susceptible to mental health issues associated with climate change, which can elevate their mortality risk through factors such as suicide and social isolation. Moreover, unmarried men face a higher likelihood of mortality during heat waves than unmarried women (Daalen et al., 2020).

D. **Increased workload**

Climate change places additional work burdens on women, exacerbating their health issues. The increased workload, such as heavier physical tasks, longer journeys to secure water and biomass, and caregiving responsibilities for sick family members, negatively impact women's well-being. Furthermore, the gendered division of labor further contributes to time constraints and health challenges for women (Röhr, 2007). In general, women in India spend more

time at home, exposing them to household air pollution from biomass used for cooking and heating, contributing to about 24% of the country's ambient air pollution from fine particles (Corensen et al., 2018).

Water scarcity due to climate change forces people to use contaminated sources for drinking, particularly impacting women, who traditionally handle water duties at home. This increases their risk of contracting water-borne diseases and leads to time-consuming water collection, taking away from other livelihood activities. Women may spend over 30% of their daily energy harvesting water in water-stressed areas during the dry season. This can lead to chronic skeletal pain in women and girls while traveling long distances for water exposes them to heat stress and violent crimes. A lack of clean water and proper sanitation infrastructure poses health challenges to women, particularly during menstruation and pregnancy, when hygiene is crucial (Corensen et al., 2018).

E. Disaster-induced risks

Women are more likely to suffer higher mortality rates in cyclones and floods. For instance, during a cyclone in Bangladesh in 1991, 90% of the 140,000 victims were women; in the 2008 cyclone Nargis in Myanmar, 61% of the 130,000 deaths were women. The combination of social inequities, culturally defined roles, and biological vulnerabilities may explain this disparity (Moosa & Tuana, 2014). The gender difference in mortality is more pronounced among women from lower socioeconomic backgrounds. Cultural factors also contribute to vulnerability, as women caring for family members at home during evacuations may face challenges in receiving warnings and accessing necessary information. Physically, regardless of age, women often face greater calorie deficiency than men, making them more susceptible to health issues and resource shortages during disasters. In the aftermath of climate-driven disasters, women and girls, especially those from lower socioeconomic backgrounds or the elderly, are at higher risk of physical, sexual, and domestic violence. Lack of support and resources exacerbates this risk, leading to higher rates of mood disorders like depression and anxiety (Corensen et al., 2018).

V. REPRODUCTIVE HEALTH AND MATERNAL MORTALITY

Climate change poses a triple effect on women, impacting their health through unique physical vulnerabilities, caregiving roles, and increased work demands resulting from environmental depletion. However, pregnant women face massive health impacts due to climate change's direct and indirect effects due to compromised immunity, physiological stress, and existing ailments. Climatic conditions such as low temperatures, high humidity, or precipitation are linked to increased eclampsia in pregnancy (Röhr, 2007). Also, pregnancy compounds vulnerability to heat, as prolonged exposure to elevated temperatures is linked to stillbirth, congenital disabilities, and preterm delivery, with younger mothers facing even higher risks. Adverse pregnancy outcomes such as gestational hypertension, preeclampsia, and poor neonatal outcomes are also associated with high ambient temperatures. The teratogenic effects of heat exposure during critical developmental stages and its impact on placental blood flow and hypertensive crises further accentuate these risks. Moreover, studies have linked air pollution to congenital disabilities, stillbirths, and restricted growth of babies in the womb. These effects may occur due to placental hypoxia or the toxic impact of air pollutants (Corensen et al., 2018).

Moreover, a warmer world fosters the rise of waterborne and vector-borne diseases, and pregnant women become particularly susceptible to malaria due to heightened attractiveness to malaria-carrying mosquitos and reduced immunity during pregnancy. Malaria-induced anemia accounts for a significant proportion of maternal mortality (Röhr, 2007). Malaria is a common cause of maternal death during pregnancy in India, accounting for 23% or more of maternal deaths in some districts. Other VBDs, like Dengue and Zika viruses, are associated with pregnancy complications such as cesarean delivery, preeclampsia, and fetal growth restriction. Zika virus has devastating effects on fetal development, leading to microcephaly, central nervous system malformations, and impaired cognitive development (Corensen et al., 2018).

Pregnant women are particularly vulnerable, experiencing increased risks of complications following disasters, such as preeclampsia, uterine bleeding, and low birth weight infants. Maternal undernutrition significantly impacts neonatal development, leading to intrauterine growth restriction, pregnancy complications, and perinatal mortality. In regions with high rates of iron-deficiency anemia, the risk of women dying during childbirth increases by up to 20%. It is important to note that over 50% of pregnant women in India suffer from anemia. (Corensen, et.al. 2018).

VI. GENDERED LENS ON CLIMATE CHANGE AND HEALTH

From the above evidence, the disparity in the health impacts induced by climate change is stark and threatening. While in most cases, women are victims of severe health impacts; many men, too, face high risk. Be it the loneliness of the unmarried or the physical inability of the old, men, too, are at risk of succumbing to heat waves and disasters like floods.

Conversely, women are plagued by multiple social inequalities, pushing them into the corner. Conditions like poverty expose women to preexisting illnesses like anemia, malnutrition, lung disease, and more. Lifestyle practices like cooking on fire and walking long distances for water make women physiologically weaker. This adds to the disproportionate access to food and healthcare due to poverty and social location. In many cultures, women are caregivers and expected to be sacrificial, putting them at the end of the food hierarchy at home while also being responsible for cooking and prepping. They also play the role of healers, where they use traditional herbs and medicines to treat and care for the sick and elders, which again puts them in a position where they prioritize everything else before themselves.

These existing inequalities, like economic status, social location, patriarchal practices, inadequate access to resources, and lack of communication opportunities, make women more vulnerable than men. Not to forget, menstruation and pregnancy only add to these pre-set vulnerabilities. Hence, policies must be implemented to consider the varied aspects of vulnerabilities and create opportunities for equal access to enable effective mitigation.

Mainlay and Tan's case study of Nepal's NAPA (National Adaptation Plan of Action) reveals how incorporating gender into climate cage mitigation and policy design was a success. However, the implementation process proved to be complicated. UNFCC's guidelines necessitate gender analysis during the formulation of NAPAs, and Nepal's Local Self Governance Act is an instance where gender equity was included. This Act is crucial for planning and formulating local initiatives and can hence, be used to ensure gender equity for schemes undertaken to combat climate change at local levels.

However, a lack of political will has hindered its implementation, and as a result, gender equity is only tokenistic. The study found a lack of understanding of gender equity and its benefits in achieving sustainable development at the institutional level. Hence, the study under this Act did not paint a holistic picture of gender analysis. Lack of gendered data was also an obstacle in such implementations as very few studies are done to understand the differential impacts of climate change on men and women. Further, the lack of women's participation in decision-making automatically lowers the chances of including women's perspectives in such policies. Hence, one can say that existing vulnerabilities create obstacles for future policies to reduce climate change impacts.

VII. GENDER-RESPONSIVE CLIMATE POLICIES AND EMPOWERMENT

Gender disparities in health data for climate change research are expected. This lack of representation hampers understanding gender-specific impacts, exacerbating existing inequalities. Limited, region-specific studies hinder broader insights and generalisability, especially concerning reproductive challenges women and girls face. Gender-specific considerations must be integrated into research and policy frameworks to address this, enabling targeted strategies to mitigate climate change's adverse health effects on vulnerable populations (Daalen et al., 2020). Addressing these gender-specific challenges requires gender-sensitive policies and interventions to mitigate the health implications of climate change on women's well-being (Röhr, 2007)

Studies have primarily been conducted in developed countries, but some of the evidence indicates that gendered health impacts are evident in developing countries too, but are understudied. The evidence suggests that women bear a higher burden of climate-induced health challenges, which may be attributed to physiological factors, caregiving roles, and limited access to food and nutrition. These findings underscore the need for gender-sensitive approaches in addressing the implications of climate change on human health (Goh, 2022). The added burdens of climate change significantly constrain women's capacity to challenge existing norms and systems, reinforcing their entrenched roles and responsibilities (Mainlay & Tan, 2012). The unequal distribution of resources, access to information, and exclusion from decision-making processes further hinder women's ability to cope effectively with the evolving environmental challenges (Mainlay & Tan, 2012).

Female voices, especially from marginalized groups, are often overlooked in climate negotiations. Despite the Gender Action Plan being a key focus at the UNFCCC's COP25 in 2019, women's representation remains low. Only 38% of delegates at COP24 were women, and heads of delegations were even fewer at 27%. Preliminary analysis of COP25 indicates that only 36% of registered Party participants were women, without non-binary options. While the Gender Action Plan adoption is a positive step, gender diversity commitments should go beyond tokenism. Gender

disaggregated data, assessments, and interventions are vital for effective climate policies that address health equity. To succeed, climate policies must tackle underlying vulnerabilities, including gender inequity. Funders, researchers, and health professionals must prioritize a gender perspective in climate change research and policy to develop sustainable solutions for this urgent health threat. All genders' knowledge and experiences are central to this discussion (Daalen et al., 2020).

The World Health Organization (WHO) in 2017 prioritized the "health impacts of climate and environmental change" as a top health concern for five years, emphasizing the importance of focusing on the well-being of women, children, and adolescents. While such goals are ambitious, significant restructuring to support these statements has not yet occurred. The Sustainable Development Goals (SDGs) encompass separate targets for poverty (SDG 1), gender equality (SDG 5), sustainability (SDG 11), and climate action (SDG 13). However, interconnecting these targets and indicators across sectors remains a challenge. For instance, energy-related indicators are present in the health goal, but no health-related indicators are present in the energy or climate goals. This lack of integration leads to inefficient efforts, discordance, and communication barriers among agencies working to address these interconnected issues (Corensen et al., 2018).

Although some advancements have been made within the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations International Strategy for Disaster Reduction (UNISDR), there is still a need for systematic integrative procedures and progress monitoring indicators. The gender action plan called for by UNFCCC decision 21/CP.22 (2017) highlights the importance of incorporating a gendered perspective in all climate change elements. Similarly, the 2015–2030 Sendai Framework recognizes climate change as a disaster-risk multiplier for women and emphasizes the need for their involvement in risk reduction efforts (Corensen et al., 2018). Mainstreaming gender into climate change discussions, strategies, and adaptation programs and assuring financial benefits to the vulnerable gender is a must to address gendered impacts for equitable resilience against climate change in the future (Röhr, 2007). Despite progress within international policy arenas, challenges persist in implementing these policies. Systematic integration and infrastructure support between organizations are lacking, and national governments often face obstacles to fully participating and benefiting from such policies (Corensen et al., 2018).

Looking at climate change-induced health impacts through a gendered lens reaffirms the understanding that policies must also have a gendered standpoint. Formulating policies for climate change mitigation must include gender as a factor of influence to ensure that all genders can receive equitable benefits. Moreover, as the impact ratios differ, the approach to solving the problems must also be unique for different genders. While it is evident that, in most cases, women are facing more potent effects, it is crucial to design policies that keep their cultural, social, and political position in mind. Accessing and communicating with women in society is difficult as they are rarely a part of decision-making and would mostly shield themselves behind tradition and society. Hence, climate change policies must ensure women’s health takes center stage when addressing climate change-induced health impacts. Moreover, policymakers must consider it an opportunity to address other crucial issues like family planning, menstrual health, clean water, pregnancy support, hygiene, education, sexual violence, and more that directly or indirectly impact women’s health.

VIII. CONCLUSION

In conclusion, the review highlights the importance of incorporating a gendered perspective in understanding and addressing the health impacts of climate change. It emphasizes that women, especially those from vulnerable and marginalized communities, bear a disproportionate burden of the adverse health effects induced by climate change due to a combination of physiological, social, and economic factors. Applying intersectionality in climate change research is crucial for recognizing the diverse and unique experiences of individuals and communities within different concurrent power structures. By identifying explicit and implicit biases, intersectionality allows for more inclusive and effective approaches to climate change policy and action.

Climate change has significant health impacts, such as heat stress, poor air quality, extreme weather events, vector-borne diseases, water quality issues, and food insecurity. Vulnerable populations, including women, children, and the elderly, are particularly affected, especially in developing countries with limited resources and adaptive capacity.

Specific gender-specific health impacts on women, including increased mortality during heatwaves, higher vulnerability to vector-borne diseases, indirect impacts of malnutrition, increased workload, psychological effects, and reproductive health challenges, highlight the need for targeted interventions.

Existing gender disparities and social inequalities exacerbate the health impacts of climate change on women, limiting their access to resources, decision-making processes, and information and hindering effective coping strategies.

Gender-sensitive policies and interventions are essential to address these challenges to mitigate the adverse health effects of climate change on women. Integrating gender considerations into climate change research, policy frameworks, and adaptation programs is crucial to ensure equitable resilience and sustainable solutions.

Transformative advocacy and collaboration among governments, international agencies, NGOs, communities, and academics are vital to drive gender-responsive climate policies and empower women as change agents.

By recognizing gender-specific disparities and addressing women's vulnerabilities, we can work towards a healthier and more sustainable future, promoting comprehensive and equitable climate resilience at local, national, and global levels. Ultimately, incorporating a gendered lens in climate change policies is fundamental for promoting health equity and building resilience in the face of climate challenges.

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