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Environmental and Climatic Changes: Impacts on Women's Reproductive Health

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Abstract

"Gender neutral" is not the case with the climate catastrophe. Climate change has a disproportionately negative impact on women and girls, amplifying existing gender disparities and posing special risks to their livelihoods, health, and safety. Women around the world are more reliant on but have less access to natural resources. Different areas of health are impacted by climate change both directly and indirectly. The negative health consequences of climate change are felt differently by men and women due to biological, social, and cultural variations. Some examples include worsening water quality and food insecurity as well as increased heat exposure and the transfer of vector-borne illnesses. Climate change is occurring in a rapidly changing environment, which threatens to exacerbate pre-existing gender-based health inequities in India. Even the slightest variations in the weather and the environment have the potential to disturb the delicate hormonal balance that regulates the menstrual cycle.

To lessen the negative effects of climate change, development, and catastrophe risk reduction on public health, a gendered perspective should be included in the policy frameworks. Mitigating climate risks requires the cooperation of several sectors, advances in data collection, the monitoring of gender-specific targets, and the equal engagement of stakeholders. Policy interventions for adaptation and mitigation of climate change may be bolstered by women's empowerment as social change agents.

Keywords: Climate Change, Health, Women, Reproductive Health.

Introduction

The phrase "climate change" is often used to refer to the worldwide occurrence of substantial climatic modifications that have taken place over a considerable length of time. The increasing levels of greenhouse gases in the atmosphere are to blame. Examples of such gases are carbon dioxide and methane. These gases soak up the sun's rays, making the land and oceans hotter. Some of the effects of this warming trend include an increase in the frequency and severity of extreme weather events, changes in precipitation patterns, higher sea levels, the disappearance of glaciers, and a general decline in biodiversity. Climate change has rapidly become one of the most important challenges of our day because it threatens all life on Earth.

The impacts of global warming have felt everywhere on Earth. Possible worldwide repercussions include increased sea levels, more harsh weather, and changes in natural ecosystems. But the local ramifications are more likely to touch us. According to the UNFCCC, climate change affects women more as it worsens gender-based health disparities. Furthermore, biological, political and cultural variables put women at risk. Gender equality, sexual and reproductive health, and climate change are all

intertwined. Climate change has the potential to exacerbate societal inequities, especially gender inequalities. Furthermore, as global temperatures rises extreme weather events such as floods, droughts, and heat waves endanger the health and rights of girls and women in particular. Gender, sexuality, age, wealth, indigenousness, and race are all determinants of vulnerability to climate change**.**

The assessment report by the Intergovernmental Panel on Climate Change indicates that human-caused extreme weather events will become more frequent and severe, which is a clear warning sign that a worldwide assault of devastating heat waves, wildfires, floods, and droughts is imminent. The devastating effects of climate change affect everyone, and by 2030, the number of people in need of humanitarian aid will be doubled. It is not a contest to see who suffers the most when nature retaliates fiercely to human wrongdoing. Women for example, who make up the majority of the world poor and whose livelihoods depend heavily on natural resources among other risk factors, are particularly vulnerable to disasters and are 14 times more likely than males to perish in a disaster (WHO, 2015).

Review of Literature

The effects of climate change are expected to worsen and are expected to accelerate (The Climate Council, 2022). Over the next 20 years, a number of inevitable climatic hazards will arise from 1.5°C global warming, according to the most current Intergovernmental Panel on climatic Change (IPCC) reports (IPCC, 2022). Furthermore, in 2014, the Intergovernmental Panel on Climate Change (IPCC) revealed a number of climate-related health issues that have recently increased. Poor air quality, the expansion of vector-borne diseases, temperature fluctuations, floods, and storms have all been linked to an increase in these health issues (Smith et al., 2014; Mahapatra et al., 2018). Individual susceptibility and adaptive capability to climate change and climate-related disasters are determined by "gender, age, race, economic status, education, and other social characteristics" (Olsson et al., 2014; Smith et al., 2014; UN Women, 2021).Researchers and scientific agencies such as the IPCC have discovered that adolescent girls and women are more vulnerable to the effects of climate change (i.e., heatwaves, droughts, floods) than men (ARROW, 2014; Olsson et al., 2014; Women Deliver, 2020). This is especially true for women who are already burdened by poverty and gender inequities. According to Women Deliver (2020), the bidirectional relationship between gender inequality and social and economic issues is to blame for the greater degree of adversity women encounter as a result of climate change. Extreme weather events, wildfires, and poor air quality can all have an influence on the mental and physical health of girls and women (Bedoya, 2018). Girls and women are more vulnerable to anemia and malnutrition during menstruation and childbirth, particularly during periods of climate-driven food instability (Sorensen et al., 2018). Anemia is associated with cognitive deficits such as poor working memory, short attention span, and poor educational performance (Jáuregui-Lobera, 2014). Furthermore, women are disproportionately affected by poor air quality due to a higher predisposition for particulate matter deposition in lung tissue and higher rates of anemia (Chen et al., 2005). Poor air pollution has been linked to unfavorable birth outcomes (rám et al., 2005) and has been linked to stillbirths, intrauterine growth restriction, and congenital impairments (Chen et al., 2005). It has been shown that climate changes, such as rising temperatures and altered rainfall patterns, may have an impact on reproductive health outcomes, including fertility rates and pregnancy outcomes. It is hypothesized that increased accessibility to reproductive health services, increased public knowledge of climate change and its consequences, and the effects of temperature variations and monsoon season timing on the use of contraceptives, reproductive objectives, and fertility are all interconnected.

Following a review of the research, two main questions emerge: how do gender disparities impact women's vulnerability to climate change and how can climate change and its accompanying uncertainties affect women's reproductive health?

Research Methodology

A literature review was used to acquire evidence. The review of literature concentrated on peer-reviewed publications, including grey literature. This work is based on secondary sources.

Effects of the changing environment on women and young girls

Today, the effects of climate change are seen in every nation on every continent, upending economies and upsetting people's daily lives. Stress from the environment and climate change disproportionately impact women and girls. Of the 26 million individuals who have been relocated due to climate change, 20 million are women. Because of their lack of authority, they are also more susceptible to the consequences of climate change. The impacts of climate change might have detrimental implications on health, such as a rise in vector-transmitted diseases, heat-related ailments, and mental health issues. While everyone has difficulties as a result of natural disasters, a review of census data on the effects of 141 countries showed that, on average, more women than men die in catastrophes or pass away at a younger age. How long these differences persist in connection to the intensity of catastrophes depends on the relative socioeconomic status of women in the affected nations. This impact is especially noticeable in countries where women hold extremely low social, economic, and political positions. In countries where they have the same status as men, men and women are affected by natural catastrophes almost equally. Anatomical distinctions between men and women are unlikely to be the cause of these disparities; instead, societal standards may provide an explanation. Natural disasters diminish women's life expectancies more than they do men's, according to a research that also looked at how vulnerable girls and women are to dying as a result of catastrophes and their aftermath. Since women typically live longer than men do, natural disasters actually narrow the gender gap in life expectancy in most countries. There is a clear relationship between the gender gap in life expectancy and the intensity of disasters, with major catastrophes having a more negative impact on women's life expectancy than lesser catastrophes and furthermore, with an inverse relationship between women's socioeconomic status and the gender gap in life expectancy (Neumayer & Plumper, 2007). Climate crises ultimately rob women of the ability to control their own fertility and, thus, their own lives. Many aspects of society are intertwined as a result of climate change. Droughts may have negative effects on human health as well as the food supply. Floods may cause damage to ecosystems and infrastructure, not to mention the potential for disease transmission. Health issues have the potential to increase death rates, impact food supplies, and decrease productivity in the workplace. In short, women are socially constructed and gender-specific susceptibility to natural disasters. This is ingrained in everyday socioeconomic patterns and contributes to higher disaster-related fatality rates among women than in males. Climate change has the potential to influence every area of our globe. However, the effects of climate change are not uniformly felt across the nation or the globe; in fact, they could vary from person to person and from neighborhood to neighborhood within a single community. Long-term economic disparities may increase the susceptibility of underprivileged groups. This is due to the fact that individuals who are already disadvantaged are typically overexposed to risks and lack the necessary tools to mitigate them. Maternal health is severely impacted by climate change, and it also fosters an environment that

exacerbates gender inequality. It can put pressure on healthcare systems and complicate treatment access. The approaching world catastrophe is by no means a reflection of a "gender neutral" perspective. The effects of climate change not only worsen an already existing gender gap but also put women and girls at particular risk for health issues, safety concerns, and their ability to support themselves. Girls and women are most affected by the consequences of climate change. Globally, women are growing increasingly dependent on natural resources, even though they have less access to them than men do. In many regions of the world, women are disproportionately responsible for ensuring that basic necessities like food, water, and fuel are always available.

Impacts on Maternal Health

The climate crisis is tipping the risk balance against women's and children's sexual and reproductive health and rights, as well as infant and child health. The health consequences of global climate change on maternal and child health cannot be ignored any longer. Heat, air pollution from wildfires, stress from natural catastrophes, and other aspects of climate change all have negative health consequences. Pregnant women are more exposed to the health risks associated with climate change, such as preterm birth, small for gestational age, hypertensive disorders of pregnancy, and other negative reproductive health and birth outcomes. According to Alam, pregnant women who are moved are less likely to receive proper prenatal and postnatal care, which may have a negative effect on both their health and the health of their unborn children. It becomes more challenging to give birth in a secure, hygienic environment without access to hospitals, nurses, and community health centers. More than half of women who pass away during childbirth live in war-torn nations with severely compromised healthcare infrastructure. Additionally, infectious diseases like cholera that occur in refugee camps are more likely to affect pregnant women. According to the US National Institute for Health, climate change poses a greater hazard to women's health in general, during both peaceful and violent periods. Pregnant women who lack access to food and water cannot acquire the nutrition they require. Women who must travel to obtain water and fuel sources are at risk for health issues like dehydration, heat stroke, and sexual assault as a result of the worsening heat waves. Women find it more difficult to access healthcare due to the strain that changing environmental conditions place on family resources.

Climate Change and Menstrual Cycle

It's general knowledge that a menstrual cycle should last for 28 days in a healthy individual. In actuality, you might find that your cycle nearly never reaches the 28-day threshold each month. This is due to the fact that even the slightest factors have the potential to disturb the delicate hormonal balance that initiates your period, shortening or lengthening your monthly cycle by a few days. In fact, even seemingly unconnected factors like climate change can have an impact on your menstruation. Variations in the weather and the environment are referred to as climate change. Some changes happen quickly, while others could persist longer. For instance, a short-term, seasonal climate change might be the annual onset of the monsoon, when the rains start to pour down. Other changes, such as the increase in global temperatures, can be viewed as more permanent. Interestingly, your menstrual cycle can be impacted by both of these climate changes.

Climatic Change and its Effect on Menstrual Cycle: Even if it doesn't directly affect the period, climate change causes many other factors that can disrupt your cycle. Here are some illustrations of how this works.

Alterations in eating habits: the eating habits may vary as a result of seasonal climate changes. For instance, the body's core temperature tends to increase when one indulges in mangoes during the summer. Because they increase pelvic heat and cause the uterus to contract, other fruits like papaya and pineapple have eminence for hastening the onset of the period. Climates that are colder could boost appetite. If one has a tendency to consume more during the colder months, this could result in higher estrogen levels in the body. Usually, menstrual cycle length is subsequently impacted by this.
Variations in the exercising habits: How active one might also be impacted by climate change. Additionally, the amount of exercise directly affects when the period starts. It is found that the menstrual cycle is often extended by one or two days if one tends to exercise more frequently in the summer. On the other hand, the periods might start a few days early when the weather gets colder and one chooses to minimize your physical activities. The length of the menstrual cycle is also influenced by the type of exercise one performs. Exercises like weightlifting and high-intensity exercise may delay the menstrual cycle by a few days.
Elevated stress levels: While short-term and seasonal climate changes don't truly have a harmful impact on the body, another type of shift is much more concerning. According to a study, women who are exposed to polluted air throughout their teens are more likely to experience irregular menstruation cycles later in life as air quality continues to deteriorate in many regions of the world. Additionally, long-term climate change causes temperatures to rise, which raises stress levels. That's never a good indication since stress has a direct impact on our body's delicate hormonal balance, causing cycles that are either longer or shorter than the healthy average(WHO,2021)(UNPF,2020).

Different Areas of Health are Impact by Climate Change both directly and indirectly:
Water Scarcity and related issues: Women are forced to carry water home from possibly hazardous sources, such streams and ponds, when there is a shortage of water. Water-related illnesses like diarrhea may arise from this, and in developing nations, diarrhea is the primary cause of mortality for children under five (WHO & UNICEF, 2005). Furthermore, when water is limited, more important water demands like drinking and cooking may take precedence over cleanliness routines. Water Aid (2007) states that "water-washed diseases" like scabies and trachoma can result from unsanitary conditions. In Africa, Asia, and Latin America, illnesses associated with poor water and sanitation already affect about half of the urban population (WHO, 2006). In a study on drought management carried out in Ninh Thuan, Vietnam, 64% of participants acknowledged that men and women are affected differently by repeated disasters, and 74% said that women were more negatively impacted by drought than men because of their distinct water demands. Every drought wreaks havoc, forcing women to gather water from increasingly distant sources. With few water sources nearby, women often have to travel great distances to seek drinking water. Women have a lot of physical responsibility since they raise children, cook, clean, and gather firewood on a regular basis (Oxfam, 2006). Pots, buckets, and more contemporary narrow-necked containers are carried by women and girls on their heads or hips. A family of five needs around 100 liters of water, or 100 kilos, each day to meet their basic needs. It could be necessary for women and kids to trek to the water source two or three times a day. Often, the first of these trips takes place before dawn, requiring the loss of sleep hours, which might have negative health effects. In rural Africa and India, women spend at least thirty percent of their daily energy obtaining water during the dry season which have a Long term results in cumulative harm to the neck, lower back, and spine, which prematurely ages the vertebral column (Mehretu & Mutambirwa, 1992). The family's

physiological demand for water has increased due to the drought, and they are now traveling a greater distance to go to the closest water source. Based on available statistics, if walking to a water source takes half an hour or more, the volume of water gathered per person is drastically decreased (WHO & UNICEF, 2005). Consequently, the quantity of water gathered often does not meet even the most basic physiological requirements of humans. This places women in a difficult position because, in many societies, women are socially responsible for providing the household with water.

Vector-Borne Diseases: Climate change is also linked to an increase in the spread of vector-borne diseases, as temperature and precipitation rates influence the survival and dissemination of these diseases. There is substantial evidence that vector-borne infections can raise the risk of spontaneous abortion, early delivery, stillbirth, and low-weight babies. Pregnant women are predisposed to mosquito-borne infections such as dengue and malaria. This is due in part to the fact that they spend more time in the house and conduct domestic activities, which puts them in greater contact to standing water. Vector borne diseases are associated with a number of unique pregnancy concerns such as caesarean section, pre-eclampsia, and intrauterine growth restrictions may be attributable to the dengue virus, which has been prevalent in India for at least for 10 years (Mutheneni et.al; 2017). Researchers Petersen et al. (2016) found evidence linking global warming to the spread of the zika virus, which is spread by the aedes mosquito and is responsible for microcephaly, as well as other abnormalities in the central nervous system and cognitive impairment in fetuses.

Extreme heat in India: Heat waves have become more common in recent years throughout India as a direct outcome of global warming. Extreme heat may be dangerous, especially for the elderly and the young. Researchers in rural India discovered that cultural norms and gender roles put women at a greater risk of dehydration, heat exhaustion, and heatstroke during heat waves. Due to their traditional roles as caretakers and water gatherers, women are sometimes forced to spend longer periods of time in the open air, even when temperatures soar. Their precarious position is exacerbated by a lack of access to cooling devices and restricted mobility.

Floods in Bangladesh: Climate change has made the already frequent and severe flooding in Bangladesh much worse. Negative effects on reproductive health, hunger, and the spread of waterborne infections are all possible after a flood. During the floods in rural Bangladesh, women had less access to healthcare, sanitation facilities, and hygiene items, leading to an increase in reproductive health concerns such as menstruation disorders and pregnancy difficulties, according to recent research. Cultural norms that limit women's mobility and access to resources compound the difficulties women already experience during floods.

Drought in Sub-Saharan Africa: More and more places in sub-Saharan Africa are experiencing devastating droughts. Droughts like this have devastating effects on food supplies, leading to health problems including hunger. The majority of these effects fall on women, who often play pivotal roles in both food production and family nutrition. Researchers in Ethiopia discovered that maternal malnutrition and its consequences—such as anemia and low birth weight—were more common during droughts. They are particularly vulnerable due to a lack of resources, such as healthcare, food, and water.

Hurricanes in the Caribbean: Global warming is increasing the destructive potential of hurricanes in the Caribbean. Strong winds, heavy rain, and dangerous storm surges are the three main causes of hurricane-related damage and health problems. After a disaster, women in these communities are more likely to be victims of gender-based violence, and the stress of displacement and loss of income may

have a detrimental effect on their mental health. The consequences on women's health are often exacerbated by pre-existing gender inequalities and cultural standards.

These studies demonstrate the wide-ranging negative effects of climate change on women's health, particularly among vulnerable populations. They stress the need of including a gender perspective into adaptation and mitigation programs for climate change to protect women's health and well-being.

Food insecurity, which may be caused by climate change, can have a major negative effect on the reproductive health of women. This is how the different aspects of the problem are connected: The effects of climate change on agricultural systems may be disruptive, resulting in lower crop yields, limited availability to healthy meals, and higher food costs. This can lead to malnutrition. As a consequence, communities, especially vulnerable ones, may face hunger and deficits in vital nutrients. Malnutrition is a condition that is more likely to affect a woman's reproductive health and the health of her children. Women, and particularly pregnant women and mothers who are still nursing their children, are more vulnerable to this condition. Malnutrition and a lack of access to food that is appropriate in terms of its nutritional value might raise the risks that are linked with being pregnant and giving birth. Women who are malnourished have a higher risk of experiencing difficulties during pregnancy, such as anemia, low birth weight, premature delivery, and even death to the mother. These health problems may have an effect, over time, not only on the health of mothers but also on the health and well-being of their children. Interaction with Poverty: The effects of climate change may make poverty worse, especially in less developed nations that rely primarily on agriculture for their economy. Women's access to basic healthcare services, particularly reproductive healthcare, is further restricted when they are living in conditions of poverty and food insecurity. Women who do not have sufficient financial means may be unable to seek adequate prenatal care, get contraception, or receive essential medical treatments throughout pregnancy and delivery. This may be a barrier for these women. Malnutrition and poor nutrition may impair women's reproductive health by altering their menstrual cycles, which can lead to irregular periods or even amenorrhea (the lack of menstruation). This can have a negative impact on a woman's ability to get pregnant. Malnutrition of any length may have a negative impact on fertility and reduce the likelihood of a pregnancy being carried to term. In rare instances, a greater risk of miscarriages may also be attributed to malnutrition as a contributing factor. Problems with Breastfeeding The inability of some mothers to get appropriate nutrition as a result of climate change might interfere with their ability to nurse their children. Inadequate maternal nutrition may have an effect on both the amount and quality of breast milk, which can lead to newborn feeding habits that are not as effective as they might be. This may contribute further to the cycle of poor nutrition, which in turn can have a negative impact on the health of children. Food insecurity due to climate change has detrimental consequences on women's reproductive health, and these effects must be mitigated by concerted efforts. Sustainable agricultural practices, increased availability of nutrient-dense foods, more economic independence for women, and universal health care are all part of this agenda. Incorporating gender-sensitive approaches into climate change adaptation and mitigation programs is crucial for addressing women's unique needs and safeguarding their reproductive health and well-being. The ability to cope with the effects of natural disasters is largely determined by nutritional status (Cannon, 2002). Women are more vulnerable to nutritional deficits because of their specialized dietary requirements, particularly when pregnant or lactating, and certain societies have household food hierarchies. In South and Southeast Asia, for example, 45-60% of women of reproductive age are underweight, while 80% of pregnant women have iron shortages. Poor nutritional status is connected with an increased prevalence

of anemia, pregnancy and delivery complications, and increased rates of intrauterine growth retardation, low birth weight, and perinatal mortality in girls and women. According to the Food and Agriculture Organization (FAO), iron deficiency can raise the risk of women dying during childbirth by up to 20% (FAO, 2002). Pregnant and breastfeeding women have additional obstacles since they require more food and water and have limited mobility. At any given time, an estimated 18-20% of the reproductive-age population is pregnant or breastfeeding (Röhr, 2007). These biological characteristics create a very fragile population inside an already vulnerable group (Shrade& Delaney, 2000).

International Policies to combat climate change related concerns: Various international frameworks and agreements are used to put into effect the international community's policies on climate change. The following are some of the most important climate change-related international policies and agreements:

United Nations Framework Convention on Climate Change (UNFCCC): Agreement on a Global Response to Climate Change (UNFCCC) The United Nations Framework Convention on Climate Change is an international convention that has been in effect since 1992. It's the big picture for global action against climate change. The notion of shared but differentiated duties is included in the treaty's broad principles, commitments, and guidance for combating climate change.

Kyoto Protocol: The UNFCCC was expanded in 1997 with the adoption of the Kyoto Protocol, which became operational in 2005. For the years 2008-2012, it mandated specific reductions in greenhouse gas emissions from industrialized nations (known as Annex I countries). Emissions trading and clean development mechanisms are two examples of the methods the convention developed to help nation achieve their goals.

Paris Agreement: The Paris accord is a historic international accord under the UNFCCC that was approved in 2015 and comes into effect in 2016. Goals include holding warming to 1.5 degrees Celsius over pre-industrial levels and keeping it far below 2 degrees C. Nationally determined contributions (NDCs) are emission reduction goals established at the national level for each participating country under the agreement. Financial aid, technological transfer, capacity-building, and adaptation are part of the deal.

Conference of the Parties (COP): Decisions under the UNFCCC are made by the Conference of the Parties (COP). Nearly 200 nations' delegates gather annually to discuss and progress the conventions and its protocols' implementation. Every year, representatives from across the world gather at the COP to discuss and decide on measures to take to combat climate change.

Green Climate Fund (GCF): Supporting poor nations' efforts to adapt to and reduce the effects of climate change, the United Nations Framework Convention on Climate Change (UNFCCC) created the Green Climate Fund (GCF). The goal of the fund is to pool substantial financial resources and transfer them to low-income nations for use in implementing climate change initiatives. Renewable energy projects, adaption programs, and capacity-building initiatives are just some of the many things it backs.

Intergovernmental Panel on Climate Change (IPCC): According to the IPCC (Intergovernmental Panel on Climate Change): The United Nations formed the Intergovernmental Panel on Climate Change (IPCC) to examine the state of climate science and report its findings to policymakers. Based on the latest scientific data, it evaluates the threats and probable consequences of climate change and recommends measures for adaptation and mitigation.

These treaties and conventions provide the groundwork for worldwide efforts to combat climate change. They advocate for international cooperation, information sharing, and coordinated action to address the serious threats presented by climate change. It must be stressed, however, that the success of these

policies depends on the dedication and initiative of individual nations and other stakeholders in their efforts to combat climate change. Despite growing research on the economic, social, and health implications of climate change on women, only two nations (Liberia and Peru) have particular legislation addressing the gender-climate link (WEDO, 2016). None of the 190 INDCs assessed by the WGC contained the right to access sexual and reproductive health services in the aftermath of climate change and climate-related disasters (Flavell, 2020). The World Health Organization (WHO, 2017) has identified the "health impacts of climate and environmental change" as one of the top four health objectives for the next five years and has advocated for the well-being of women, children, and adolescents to be at the forefront of global health and development. Theoretically, such lofty objectives may start to close policy gaps, but significant organizational restructuring to back up such claims hasn't happened.

There are distinct goals for gender equality (SDG 5), sustainability (SDG 11), and climate action (SDG 13) in the Sustainable Development Goals (SDGs). During the SDGs' formulation, several chances to link these disparate aims together through indicators and sub-targets that span sectors were squandered. Consequently, no health-related indicators exist in the energy or climate objectives, but there are energy-related indicators in the health goal (relating to household usage of biomass fuels). Discordant efforts, inefficiencies, and hurdles to communication between the many organizations involved in resolving these multi segmental issues result from disaggregation and the failure to clearly connect health with these other priority areas. Comparably, there have been some developments in the United Nations International Strategy for Disaster Reduction (UNISDR) and the United Nations Framework Convention on Climate Change (UNFCCC). In order to address gender issues in all areas of mitigation, adaptation, capacity building, technology, and financing, a gender action plan is required by UNFCCC resolution 21/CP.22 (2017). This framework lays the groundwork for action, but it lacks systematic integrative methods and progress indicators. Women's vulnerability to disaster risk is formalized by the (2015–2030) Sendai Framework, an international agreement to set shared objectives and guidelines for disaster risk reduction. In addition, adopters are required to "work with all relevant institutions to prepare, review, and update preparedness policies, plans, and programs, and to facilitate the participation of all sectors and stakeholders" (UNISDR, 2015).

Currently, international and national policy, only mentions the disproportionate effects of climate change on women in passing. These frameworks or constitutions do not provide guidance to states on how to manage the inclusion of requirements from populations with substantial gender and intersecting inequities. Adaptation is based on the resilience and capacity of the impacted individuals and communities. Resilience and adaptation necessitate transformative change, which necessitates the elimination of structural inequities and restrictive norms that obstruct gender equality.

Recommendations

Governments and international organizations should create and execute gender-responsive frameworks and policies regarding the climate. Incorporating a gender lens into climate change adaptation and mitigation plans, expanding opportunities for women to participate in decision-making, and tailoring responses to women's unique needs and vulnerabilities are all necessary steps. Help women in climate-affected communities have better access to reproductive health services through strengthening healthcare systems. This involves expanding access to hospitals, medical experts, and life-saving drugs in underserved areas. Prenatal care, maternal health, and family planning services need priority funding.

Equal access to education, employment, and economic opportunities are essential to empowering women. Women may actively contribute to sustainable development, climate change adaptation and mitigation initiatives, and health decision-making when they have access to better education and economic empowerment. Investment in climate-smart agricultural methods that increase sustainable food production and guarantee food security is needed to support resilient agriculture. This involves ensuring that women farmers have access to crops that can withstand changing weather conditions, teaching them how to practice sustainable agriculture, and opening doors to new markets and financial opportunities. Improve early warning systems and disaster response processes to meet the unique requirements of women in the event of climate-related disasters. This involves making sure that, safe places to stay, clean bathrooms, and soap are all easily accessible. All policy frameworks have implementation issues, despite the fact that international policy areas have seen tremendous advancements. Both inside and across organizations, there are insufficient systematic processes to integrate policies, and there is frequently a lack of regional infrastructure to support such aims. Additionally, national governments whose constituents would benefit from such policies are not always actively involved. Indicators for project and policy success should be derived from women's health outcomes and economic prosperity, which may act as stand-in markers for development, catastrophe risk reduction, and climate adaptation. In a similar vein, areas with subpar health outcomes have to be designated as hotspots for both present-day and future climate change risks.

Conclusion

Women's health is particularly vulnerable to the many harmful impacts of climate change. Women, particularly those from disadvantaged communities, suffer disproportionately from the effects of natural catastrophes such as heat waves, floods, droughts, and hurricanes. In order to effectively address the problem of climate change, it is essential to take into consideration the specific ways in which it impacts women. It is critical to ensure that climate initiatives do not aggravate disparities. As a result, climate action must be gender-responsive, recognizing gender variations in adaptation requirements and capacities; promoting gender-equitable involvement and influence in adaptation decision-making processes; and promoting gender equitable access to finance. This is incorporated in recent United Nations Framework Convention on Climate Change decisions. Increase the emphasis on inclusive gender-balanced stakeholder participation in climate policy. Participatory procedures that include individuals in all of their diversity are critical to ensuring that holistic needs are identified and addressed, as well as that the subsequent analysis and messaging reflect an intersectional lens. This is vital for a human rights-based strategy to climate action, and it can also help identify context-specific needs and capacities in relation to climate change. More investment in study and action on the social and gender dimensions of climate change is required. By breaking down divisions, research efforts that bring together climate, health, and gender experts can assist to encourage more integrated analysis. Recognizing the links between gender and climate change is critical for developing an effective climate change response while simultaneously advancing gender equality. Building a sustainable future for all demands girls' and women's full potential and engagement in environmental and climate action, and realizing that potential is dependent on their health and rights. Empowering women, promoting gender equality, strengthening healthcare systems, supporting sustainable agriculture, and improving disaster preparation are all essential to addressing the special needs and vulnerabilities of women. The negative health effects of climate change on women may be lessened and more resilient and sustainable

communities can be built, if we embrace gender-responsive climate policies, invest in women's education and empowerment, and guarantee them access to healthcare and resources. In the end, a more fair, equitable, and sustainable future for everyone depends on tackling the effects of climate change on women's health and working toward gender equality.

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