

View Point

Relationship Between Water, Sanitation, Climate Change, and COVID-19

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Introduction:

Climate change is the utmost crucial challenge of the 21st century with the significant potential to cause human and economic damage. COVID-19 is a global public health emergency that has caused millions of deaths worldwide.¹ Studies reported that thorough sanitation practices, safe and clean water, and proper hygiene services are considered the crucial part of protecting the health of humans during the infectious disease outbreaks such as the global COVID-19 outbreak.²

To date, it is reported that one of the most effective strategies for increasing the “COVID-19 pandemic preparedness” is the investment in the core “public health infrastructure including water and sanitation system.” Waste management and Good wash practices, should properly applied properly and this serve as a barrier to the human-to-human spread of the COVID-19 virus in different paces including “homes, health care centers, communities, schools, and other public places.”³

According to WHO reports, yet most of the world’s population lacks a proper and reliable water supply. Though this COVID-19 pandemic has created awareness of both the extent and outcomes of this water access gap. Regular and proper handwashing is fully recommended to combat COVID-19 infection and it is considered the basic frontline defense system against the transmission of COVID-19.⁴

Regardless of its significance, the infrastructure of water is considerably underfunded, especially in the rural areas, slums, and refugee camps, where there is no availability to sufficient water due to climate change.

COVID-19 adversely affect people living in these informal settings due to the lack of availability of clean and safe water.⁴

The goal of the Sustainable Development Goal 6 is to provide universal and equitable access to water and sanitation to the general public. COVID-19 pandemic badly affected the sustainable development goals (SDGs) including good health and wellbeing of the individuals, clean water and sanitation, affordable and clean energy, climate action, and less commitment to global action. Throughout the COVID-19 pandemic, the humanitarian activists have exclaimed for proper distribution of water for mitigation strategies and hygiene recommendations.⁵ Although, these campaigns conform to frequently “unreliable water supplies” globally.

Due to climate change, studies reported that unprecedented extreme weather has been taken place back in 2019 and caused water-stress and water scarcity in the affected regions such as heavy flooding in the south Asian region, the driest year has been recorded in Australia, and reduced rainfall observed in Central America and sub-Saharan Africa. To access safe and clean water, millions of people travel daily for 30 min, among them, many living in informal and casual settings and have further risk of COVID-19 due to jammed and improper living conditions that promote COVID-19 transmission.⁵

There is a current need for the detailed monitoring and proper management for supply of water and to improve water forecasting to follow the planning of safe and clean water projects by increasing climate change. However, such type of planning is crucial for COVID-19

infection because the water allocation resources must be prioritized in those communities living in informal settings due to the greater risk of disease exposure.⁶

To reduce the transmission of COVID-19 and to practice safe hygiene, access to sufficient and safe water and sanitation is required. To provide quality care and to reduce the spread of antimicrobial resistance, access to these services is essential in health facilities to prevent infectious diseases. Data reported that 1 in 4 health care facilities lacks basic water services around the globe. Approximately 80% of the world's population already experiencing severe water scarcity. Also, climate change further threatens the availability of water for food production, food consumption, personal hygiene, and medical care such as an infectious disease like COVID-19.

Climate action and water conservation measures must be taken to improve the efforts for safe water accessibility. There is a current need for industry and policy-makers to develop such methods to guarantee the "fair allocation" of the resources in response to COVID-19 global pandemic. Climate and water are central to achieving goals on "sustainable development, climate change, and disaster risk reduction and management." In order to strengthen the global healthcare systems urgent action and critical analysis is required that discern the relationship between COVID-19 and the environment.⁴

Different organizations worldwide have taken initiatives for better water quality and accessibility in the time period of COVID-19. There is a need for the improvement of the institutional water, sanitation, hygiene, and supply of water on smaller scale for handwashing, and equitable access to water and increasing resilience to

climate change. Effective information exchange and monitoring are helpful to mark the emerging health issues. To prevent future crises, financing access to water supplies, sanitation and trans-boundary water cooperation is more significant.

References:

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