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RESEARCH ARTICLE

# COVID-19 One Health Approach

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| Article History | | | |
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In 2019, the coronavirus disease-19 (COVID-19) emerged as a highly transmittable, pathogenic viral infection. It led to a severe acute respiratory syndrome which was labelled as SARS-CoV-2 when first noticed in Wuhan, China and started spreading as a global pandemic [1]. The World Health Organization (WHO) declared COVID-19 as an International Public Health Emergency on 30$^{th}$ Jan, 2020. Till date, 104,404,959 cases of COVID-19 and 2,263,032 deaths have been reported worldwide [2]. A number of scientific publications flooded throughout the world on modes of transmission of COVID-19 [1], knowledge and awareness about COVID -19 among health professionals [3], comparisons of COVID-19 with 1918 Flu Pandemic [4]. Gradually studies and reviews on different diagnostic techniques, including RT-PCR, CT Chest were reported [5]. Lots of work on possible modes of prevention and treatment were documented, including social distancing, Lockdown, antimalarial and antiviral drugs trials, convalescent plasma therapy [6 - 8]. Trials and effectiveness of chest physiotherapy on severe COVID-19 cases were reported [9]. The short-term control measures for handling the pandemic like 'lockdown' of institutions and public places, restrictions on the trade and travel cannot be kept for a longer. Preventive public health measures like hand hygiene practices, masks, social distancing, quarantine, Personal Protective Equipment (PPEs), and other workplace interventions were suggested to reduce the transmission of the disease [10].

Till November 2020, hardly any promising solution was available for clinical treatment of COVID-19. Also, effective prevention strategies which were earmarked against human coronaviruses proved to be futile. The researchers continued to develop efficient therapeutic strategies to tackle the battle against novel coronaviruses. Some of the broad-spectrum antivirals which were used against influenza, SARS and MERS coronaviruses in the past were re-evaluated. Trials of Remdesivir, Lopinavir, Ritonavir, and Oseltamivir were reported [1]. Many companies around the world were struggling to develop an effective vaccine against COVID-19. Issues of need for rapid animal and human trials popped-up. News on questionable efficacy and effectiveness of vaccines developed by China flashed. In these circumstances, India declared the launch of its indigenously developed vaccines [11 - 13] and the whole world was looking towards the mass vaccination campaign against COVID-19 in India.

Amidst all this situation, prevention still remains a mainstay in COVID-19 epidemic and WASH is a key to the prevention of further outbreaks. WASH is the collective terminology for Water, Sanitation and Hygiene. The role of provision of safe water, proper sanitation and hygienic conditions is evident in protecting human health during all infectious disease outbreaks. Consistent practice of applicable WASH strategies and waste management at community, household, workplace and health care facilities can prove to be the effective prevention modality for human-to-human transmission of the SARS-CoV-2. As the vaccination campaign moves on, the immunity at the community level and herd immunity will help to decode the future scenario. Challenges are expected to be posed due to changes in viral strains. So the preventive measures and vaccination need to go hand in hand with continuous vigilance. Close follow-up of patients and vaccinated individuals should be ascertained to ensure the prevention of upsurgence of this pandemic. Any complications and adverse events in cases and vaccinated individuals need to be attended to, investigated, handled and reported carefully. Effective public health interventions need the contribution of human, animal and environmental health partners. Human health care professionals, animal health professionals, environmentalists and other experts from related fields need to

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come on a common platform; discuss, plan and sourceorate on the key prevention activities. One Health Approach is the critical key to control future pandemics [14,15].

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