

UNVEILING THE THREAT OF CRIMEAN-CONGO HEMORRHAGIC FEVER IN PAKISTAN: APPROACHES AND CHALLENGES

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In the long list of global health concerns, some public health threats emerge quietly, yet cause serious outbreaks. One such vector-borne threat is Crimean-Congo Hemorrhagic Fever (CCHF), a viral disease transmitted by ticks and contact with infected animals.¹ With its diverse geography and climate, Pakistan is particularly susceptible to vector-borne diseases like CCHF.² The country also faces numerous health challenges, ranging from infectious diseases to resource constraints; thus, the emergence of CCHF poses a significant risk that demands immediate attention and proactive measures.³

The deadly virus is not new to the region; sporadic outbreaks have occurred. In Pakistan, the first reported case of CCHF came from Rawalpindi General Hospital in 1976, resulting in 11 secondary cases – three of which proved fatal³. Since then, multiple serologically confirmed CCHF cases have been reported from all over Pakistan. The highest numbers so far have been recorded from Baluchistan, followed by Punjab, Khyber Pakhtunkhwa, and Sindh province. The most recent outbreak was confirmed in June 2023 from Baluchistan with 81 suspected cases, 27 laboratory-confirmed cases, and 3 deaths.^{1,4}

The implications of a widespread CCHF outbreak in Pakistan are grave. With symptoms ranging from fever and muscle aches to severe hemorrhaging and organ failure, the disease not only threatens individual health but also strains healthcare infrastructure already burdened by existing challenges. Hospitals and medical facilities, especially in rural areas, may find themselves overwhelmed and ill-equipped to handle a sudden surge in cases, leading to increased mortality rates and socioeconomic disruptions.⁵ Pakistan's agricultural sector, a vital component of its economy, is at particular risk due to the virus's transmission through livestock.⁶ Farmers and livestock handlers, already vulnerable due to socioeconomic disparities, face potential devastation as their livelihoods hang in the balance. The detrimental effects extend beyond the agricultural sector, causing ripples in sectors such as trade and

tourism, diminishing the overall productivity rate.⁵

Addressing the repercussions of CCHF requires a multi-pronged approach that encompasses the spheres of surveillance, prevention, and response strategies. Implementing enhanced surveillance systems to detect and monitor potential outbreaks prematurely is an effective, albeit old method. However, for a coordinated response, collaboration between health authorities, veterinary services, and other relevant stakeholders is necessary. Another very effective method of nibbling the evil in the bud is by inaugurating preventive measures ranging from organizing public awareness campaigns and vector control programs, to educating the masses about the importance of personal protective measures; such as avoiding contact with infected animals and liberally using insect repellents. Similarly, targeted interventions to control tick populations, particularly in high-risk areas, can mitigate the incidence of CCHF.^{5,7}

For the country to respond to CCHF outbreaks in an efficacious and efficient manner investments must be directed towards healthcare facilities, equipping them with the necessary resources, training the healthcare workers in CCHF management protocols, and establishing rapid response teams capable of deploying swiftly in the event of an outbreak. Cooperation and collaboration with neighboring countries - facing similar local epidemics - and global health organizations in the form of information sharing, resource mobilization, and coordinated action plans are also vital in confronting the dangers of CCHF. By pooling together our resources and showing a united front in critical situations, emerging health threats like CCHF can be overcome.⁸ In fighting against the malady of Crimean-Congo Hemorrhagic Fever, Pakistan stands at a critical juncture. The time for the government to act is now, by carrying out a proactive and timely intervention to reduce the threat and protect the public. If we want to halt the snowball effect, ending in a nationwide outbreak, prioritizing CCHF prevention, preparing accordingly, and carrying

out our responsibilities are of paramount importance, lest it be too late.

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