

Editorial

Bridging the Preparedness Gap: Strengthening Mpox Diagnostic and Management Capacity Among Healthcare Workers in Pakistan

Syed Razi Haider Zaidi¹, Alishba Rasool²

¹⁻²King Edward Medical University, Lahore

Healthcare workers play a crucial role in disease surveillance and outbreak response, so it is essential to make sure they're prepared to handle new illnesses like Mpox. Learning from the COVID-19 pandemic, a key component of successful containment is readiness through sufficient training and awareness. For prompt case detection and containment, a thorough grasp of Mpox's clinical symptoms is essential.¹

A recent study that was published in the Journal of Pakistan Association of Dermatologists reveals alarming gaps in Pakistani healthcare providers' diagnostic expertise and clinical Management about Mpox. Only 15% felt very confident in diagnosing and managing the Mpox cases. These results align with more general national and global patterns.² Also a cross-sectional survey carried out in Rawalpindi showed only a few physicians had a good understanding of Mpox, while a sizable fraction indicated insufficient institutional readiness and a lack of established protocols.³

Similar gaps in knowledge have been reported worldwide. Only 26% of HCWs had sufficient knowledge on mpox, according to a comprehensive review and meta-analysis, with even lower levels seen among less seasoned professionals. These results recommended that training programs should be designed with younger HCWs with less healthcare experience in mind. Furthermore, it is crucial to find strategies on how to improve the attitudes and knowledge of healthcare workers around the world regarding illness⁴.

Direct clinical experience with mpox patients has been found to significantly enhance both awareness and application of preventive measures, reinforcing the value

of hands-on training and exposure in outbreak preparedness. Physicians may rely more on theoretical knowledge, while paramedics and nurses may gain practical insights through direct patient care, potentially influencing their attitude and compliance with infection control practices. Role-specific, experiential training programs are essential to enhance clinical preparedness and ensure effective outbreak control in human healthcare settings.⁵

Pakistan is ill-prepared to handle a new endemic outbreak, particularly in the wake of COVID-19, given its current economic difficulties and inadequate healthcare facilities. Thus, it is essential to educate the at-risk population and train medical professionals nationwide in the diagnosis and treatment of infections.⁶

Limited training opportunities for doctors, scarce laboratory resources, and incoherent frameworks for medical education, intensify these early case detection issues in Pakistan. Particularly impacted are primary care doctors, who frequently serve as the initial point of contact within the healthcare system. Their limited exposure to newly emerging infectious diseases like mpox weakens the entire response of the health system by decreasing the possibility of prompt diagnosis and timely referrals.⁷

The voids in Mpox diagnostic and management capacity among the healthcare professionals in Pakistan is an alarming concern and has to be addressed rightly. This can also be guaranteed by incorporating Mpox training into undergraduate and graduate medical education programs. To enhance the clinical skills and knowledge of healthcare professionals, academic programs must prioritize capacity-building in partnership with civil society organizations, non-governmental organizations. It is also mandatory to establish training programs, workshops, and seminars for the ongoing professional development of healthcare workers focusing on new infectious illnesses. Important components including case identification, infection prevention and control (IPC) strategies, and evidence-based management practices should be highlighted in such interventions, strengthening



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surveillance systems and ensuring the availability of laboratory equipment.

This problem should be addressed from the grass root level. Continuous efforts should be made to improve the primary healthcare system within our country. Countries with a robust primary health care system undergo less upheaval of their health services during any health calamity outbreak. Moreover, an educated and well-trained workforce is essential to a robust healthcare system.

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