

Digital health in Pakistan: Promise, potential, and pitfalls

Muhammad Saleem Laghari

In recent years, digital health has emerged as a transformative force across global healthcare systems, offering innovative solutions to long-standing challenges. In Pakistan, a country with a fragmented healthcare infrastructure, uneven geographic access, and a growing burden of both communicable and non-communicable diseases, the potential of digital health technologies (DHTs) is extensive. From telemedicine platforms bridging rural-urban divides to mobile health applications improving maternal care, digital health technologies hold the potential to revolutionize service delivery and health outcomes. However, this transformation is not without its pitfalls. The integration of digital tools into Pakistan's complex and often under-resourced health system faces numerous barriers, including inadequate digital literacy, limited internet penetration in remote areas, weak regulatory frameworks, and concerns over data privacy and security.¹ Additionally, the absence of a unified national digital health strategy has led to fragmented initiatives, many of which remain pilot projects with limited sustainability.²

One of the most promising developments in recent years is the government's increasing recognition of digital health as a key component of universal health coverage. Initiatives such as the National Telehealth Program and the use of mobile-based immunization tracking systems have demonstrated success in improving outreach and efficiency.³ Furthermore, during the COVID-19 pandemic, digital platforms played a crucial role in contact tracing, vaccine registration, and disseminating public health information.⁴

Despite these revolutions, significant disparities persist. Rural populations, women, and low-income communities often remain excluded from the benefits of digital health due to socioeconomic and infrastructural limitations.⁵ Moreover, the lack of standardized training for healthcare professionals in digital tools hampers their effective utilization.

To fully utilize the potential of digital health, Pakistan must invest in robust digital infrastructure, ensure equitable access, strengthen governance mechanisms, and foster multi-sectoral collaboration. It is imperative that future policies prioritize inclusivity and sustainability, ensuring that digital health becomes a tool for empowerment rather than exclusion.

As other countries in the world demonstrate successful digital health integration, which requires more than technology, such as political will, institutional capacity, and sustained commitment to equity. The time is ripe for Pakistan to adopt a comprehensive digital health policy framework that not only supports innovation but also safeguards rights, ensures accountability, and promotes universal health coverage.

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Prof. Dr. Muhammad Saleem Laghari
Professor of Paediatric
Principal,
Journal of Sheikh Zayed Medical College
Rahim Yar Khan