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# THE IMPACT OF COVID-19 ON DIGITAL HEALTH AND CARE IN SAUDI ARABIA

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#### Abstract:

The outbreak of the COVID-19 pandemic has had a profound impact various sectors around the world, including digital health and care systems. Saudi Arabia, like many other countries, has faced significant challenges in ensuring the continuity and effectiveness of its healthcare services while minimizing the risk of virus transmission. This essay explores the impact of COVID-19 on digital health and care in Saudi Arabia, focusing on the changes in healthcare delivery and utilization, the adoption of digital technologies, and the challenges and opportunities that have emerged. The findings show that COVID-19 has accelerated the adoption and integration of digital health technologies in Saudi Arabia, leading to improvements in care delivery, increased patient engagement, and enhanced healthcare access. However, challenges such as the digital divide, data privacy concerns, and the need for cybersecurity measures must be addressed to fully harness the potential of digital health and care in the country.

**Keyword**s: COVID-19, digital health, care, Saudi Arabia, healthcare delivery, adoption, challenges, opportunities.

# Introduction:

COVID-19 has disrupted healthcare systems worldwide, necessitating innovative strategies to provide efficient care while limiting physical contact and reducing the risk of virus transmission. In Saudi Arabia, the pandemic has prompted the rapid adoption and implementation of digital health technologies, transforming the healthcare landscape. This essay aims to examine the impact of COVID-19 on digital health and care in Saudi Arabia, focusing on changes in healthcare delivery, adoption of digital technologies, and the challenges and opportunities that have transpired.

The COVID-19 pandemic has had a significant impact on digital health and care in Saudi Arabia, accelerating the adoption and utilization of digital technologies in the healthcare sector. Here are some key ways in which COVID-19 has influenced digital health and care in Saudi Arabia:

Telehealth and remote consultations: To reduce the risk of virus transmission and ensure continuity of care, telehealth services and remote consultations have become increasingly prevalent in Saudi Arabia. Healthcare providers have implemented telemedicine platforms and video conferencing tools to enable patients to consult with doctors remotely. This has allowed individuals to receive medical advice, prescriptions, and follow-up care without the need for in-person visits, minimizing exposure and promoting social distancing.

Remote monitoring and wearables: The pandemic has highlighted the importance of remote monitoring and wearables in managing chronic conditions and monitoring patients' health remotely. In Saudi Arabia, healthcare providers have increasingly utilized remote monitoring devices and wearables to track vital signs, collect health data, and provide timely interventions. This has helped in managing patients with chronic illnesses and reducing the burden on hospitals and clinics.

Digital health platforms and apps: The demand for digital health platforms and mobile applications has surged during the pandemic. Saudi Arabia has witnessed an increase in the availability and use of health-related apps for various purposes, such as symptom tracking, mental health support, medication reminders, and fitness tracking. These platforms and apps have facilitated self-care, provided health information, and connected individuals to healthcare services and resources.

Electronic health records (EHRs) and interoperability: The pandemic has underscored the importance of efficient data sharing and interoperability among healthcare providers. In Saudi Arabia, efforts have been made to enhance the adoption of electronic health records (EHRs) and establish interoperability standards to enable seamless exchange of patient information between different healthcare facilities. This has improved care coordination, reduced duplication of tests, and facilitated better decision-making for healthcare professionals.

E-pharmacy and medication delivery: COVID-19 has led to an increased demand for e-pharmacy services and home delivery of medications. In Saudi Arabia, online pharmacy platforms and medication delivery services have gained popularity, allowing individuals to order medications and healthcare products online and have them delivered to their doorstep. This has not only provided convenience but also minimized the need for physical visits to pharmacies, reducing the risk of exposure to the virus.

Public health surveillance and contact tracing: Digital technologies have played a crucial role in public health surveillance and contact tracing efforts in Saudi Arabia during the pandemic. The government has utilized mobile applications and tracking systems to identify and monitor individuals who may have been exposed to COVID-19. These technologies have helped in early detection, rapid response, and containment of the virus.

The COVID-19 pandemic has acted as a catalyst for the integration and expansion of digital health and care in Saudi Arabia. The adoption of these technologies has improved access to healthcare services, enhanced patient convenience, and supported the healthcare system in managing the challenges posed by the pandemic. It is expected that these digital health advancements will continue to evolve and become an integral part of the healthcare landscape in Saudi Arabia even beyond the pandemic.

# Method:

This research is primarily based on a comprehensive review of relevant literature from reputed academic journals, government reports, and professional publications. A systematic search was conducted using databases such as PubMed, Google Scholar, and Saudi Digital Library, using keywords related to COVID-19, digital health, care, and Saudi Arabia. The selected articles were

critically analyzed, and themes related to the research objectives were identified and synthesized to provide an in-depth understanding of the topic.

# **Results:**

The impact of COVID-19 on digital health and care in Saudi Arabia has been substantial. One of the key changes observed is the increased utilization of telemedicine and virtual care services. Healthcare providers rapidly implemented telehealth services to ensure continuity of care, minimize in-person visits, and facilitate remote consultations. This shift has not only reduced the burden on healthcare facilities but also improved accessibility and convenience for patients, especially those living in remote areas.

Furthermore, the pandemic has accelerated the adoption of digital technologies such as mobile applications, wearable devices, and remote monitoring systems. These technologies enable remote patient monitoring, symptom tracking, and self-assessment, enhancing disease management and promoting proactive healthcare. Digital health platforms have also facilitated the dissemination of accurate, up-to-date information about COVID-19, enabling individuals to make informed decisions and seek timely medical help.

#### **Discussion:**

The rapid adoption of digital health technologies in Saudi Arabia has presented both challenges and opportunities. One of the major challenges is the digital divide, with certain segments of the population lacking access to the necessary technology and internet connectivity. Efforts are needed to bridge this gap and ensure equitable access to digital health services.

Another challenge is data privacy and security concerns. As the use of digital health platforms increases, the protection of sensitive patient information becomes paramount. Adequate measures must be implemented to safeguard personal health data and ensure compliance with privacy regulations.

Despite these challenges, COVID-19 has created opportunities for the further development and integration of digital health and care systems in Saudi Arabia. The widespread adoption and acceptance of telemedicine during the pandemic have demonstrated the potential for remote healthcare delivery. The government and healthcare organizations can leverage this momentum to invest in infrastructure, training, and policies to establish a robust digital health ecosystem.

# **Conclusion:**

The COVID-19 pandemic has acted as a catalyst for the advancement and implementation of digital health and care systems in Saudi Arabia. The adoption of telemedicine and other digital technologies has significantly improved healthcare delivery, patient engagement, and access to healthcare services. However, challenges related to the digital divide, data privacy, and cybersecurity must be addressed to ensure a more inclusive and secure digital health landscape. The lessons learned from the pandemic should guide future policies and investments to build a resilient healthcare system that combines the best of digital technologies and in-person care delivery.

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