Abstract

Challenges and Opportunities of the Use and Adoption of Telemedicine for Diabetes Care and Management During the COVID-19 Pandemic and Beyond

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Abstract

Background: More than half of the world's population deals with noncommunicable diseases causing premature death. Leveraging digital solutions like telemedicine, health care providers (HCPs) can provide medical care remotely. Yet, there is little known about the contextual challenges and opportunities of leveraging telemedicine solutions in varying socioeconomic and cultural contexts, including Kuwait.

Objective: The aims of this paper were as follows: (1) uncover the challenges and opportunities of adopting and using telemedicine for diabetes care and management from the viewpoints of HCPs and patients with diabetes; (2) explore nonfunctional requirements for telemedicine applications for diabetes care and management; and (3) offer recommendations to improve the adoption of telemedicine in Kuwait's health care system for diabetes care and management.

Methods: Through semistructured interviews, this study employed a qualitative and exploratory design to uncover rich context-specific findings. Participants were recruited via social media platforms. The analysis followed a thematic analysis approach and used the framework method. Researchers used the "diffusion of innovation" model as a lens to guide the analysis and interpretation of the results.

Results: A total of 20 interviews were conducted—10 (50%) HCPs and 10 (50%) patients with diabetes. The participants were familiar with and interested in adopting telemedicine. Challenges included a lack of telemedicine infrastructure and how to increase patients' technology awareness. Patients with diabetes mentioned that telemedicine would save time and effort. The participants suggested developing a secure, user-friendly telemedicine solution. They stated the importance of telemedicine during the pandemic, as many diabetes cases can be followed up online, which reduces virus spread and increases patients' safety.

Conclusions: The findings from this study can give a better understanding of what HCPs and patients with diabetes need to accept the adoption of telemedicine in resource-rich countries like Kuwait. The COVID-19 pandemic impacted the ways HCPs deliver medical care to patients and encouraged both HCPs and patients to explore the digital platform for continuous care and management of diabetes.

Conflicts of Interest: None declared.

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KEYWORDS

telemedicine; informatics; kuwait; public health informatics; COVID19; diabetes

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