

Telemedicine in focus: Critical analysis of scientific evidence

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ABSTRACT

Introduction: Due to globalization and the advances of the internet, they have profoundly transformed social interactions, requiring the creation of new paradigms in communication, including in the field of medicine. In this context, telemedicine has emerged as a crucial tool in the global scenario, characterized by the use of information and communication technologies in the provision of health services, particularly in situations where distance becomes a significant obstacle to adequate care. In this context, the COVID-19 pandemic has intensified the need for and adoption of telemedicine, making it an indispensable alternative for patient care, especially in times of mobility restrictions and overload of health systems. In Brazil, where the territorial extension presents considerable challenges to access to health, telemedicine has proven vital to expand coverage and ensure that the most vulnerable populations can receive adequate care. However, for virtual care to be effective, it is essential that health professionals integrate evidence-based medicine into their practices, ensuring that clinical decisions are based on robust data and adapted to the clinical, social, and economic conditions of each patient. In this way, telemedicine can not only facilitate access, but also ensure the quality of care offered in an increasingly digital and interconnected scenario. **Objective:** To analyze the scientific evidence related to the application of telemedicine, with a focus on understanding its effectiveness, benefits, and challenges in health care, especially in scenarios where distance and accessibility are critical factors. **Methodology:** The study was characterized as qualitative and exploratory in the format of a literature review. For the process of systematizing the searches, publications referring to the last five years (2019-2024) were considered, the following databases were used: Scielo, Pubmed, and VHL, using the descriptors: Telemedicine, Information Technology, Health Care, and Digital Health. **Results/Discussion:** In the searches, a total of 848 pieces of evidence were found, which after going through the process of screening and evaluation of abstract titles, the analysis revealed that 35 were suitable for a thorough reading, which resulted in the selection of eight studies as the main results and that were in line with the proposed objective. Telemedicine, which emerged in the 1960s, has evolved as a practice that integrates doctors and patients at a distance. In Brazil, the Federal Council of Medicine (CFM) initially limited its use to interactive methodologies for health care, education, and research. However, in 2020, due to the COVID-19 pandemic, the CFM recognized the importance of telemedicine for the continuity of care, marking a significant advance. Studies highlight its benefits, such as reduced consultation time, greater adherence to treatment, and improvements in patients' quality of life, especially in interventions such as digital psychotherapy and teleconsultation. While telemedicine has overcome geographical and financial barriers, the need for face-to-face care remains in cases that require more detailed assessments. **Conclusion:** It is concluded that technology profoundly impacts life and society, offering both benefits and challenges. The responsible use of technology, based on ethical regulations and equal access, is essential to ensure the maintenance of health care. However, technology alone does not solve all problems. Thus, human collaboration and the implementation of concrete actions in telemedicine are essential to ensure effective, comprehensive, and humanized health care delivery.

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