



Chapter 4


Elderly's Intention to Use Teledentistry Services: Antecedents and Challenges


Ahmed Chemseddine Bouarar
University of Medea, Algeria

Achouak Bouarar
University of Blida 1, Algeria

Dachel Martínez Asanza
 <https://orcid.org/0000-0002-1830-7137>
*National School of Public Health,
Cuba & University of Medical Sciences
of Havana, Cuba*

Kamel Mouloudj
 <https://orcid.org/0000-0001-7617-8313>
University of Medea, Algeria

Smail Mouloudj
 <https://orcid.org/0000-0002-7390-6175>
*University of Medea, Algeria &
University of Salamanca, Spain*

Majedeh Bozorgi
 <https://orcid.org/0009-0009-1755-3115>
University of Salamanca, Spain

ABSTRACT

This research seeks to answer two questions: (1) What are the factors affecting elderly's intention to use teledentistry services? (2) What are the barriers to the adoption of teledentistry services among older people? To achieve this, the authors conducted a literature review related to this issue. The chapter is organized as follows. After the first section introduction, the second section deals with the conceptual framework of the research topic. The third section of the chapter is devoted to explaining the research methodology. As for the fourth section, it was devoted to discussion the results associated with intentions to use teledentistry and barriers to adoption of teledentistry among older adults. Finally, research directions, practical implications, and conclusion are presented in the last section.

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INTRODUCTION

Although teledentistry was launched more than thirty years ago, its spread was not great. However, the COVID-19 pandemic has accelerated the adoption of teledentistry services (Aboalshamat et al., 2022), including video consultations (Menhadji et al., 2022) to avoid transmission risk and ensure continuity of care delivery (Beltrán et al., 2022; Lee et al., 2022). Some researchers mentioned that the COVID-19 pandemic led to the suspension of routine and non-urgent dental care (Murthy et al., 2022; Zain et al., 2023). Bouarar et al. (2022, p.34) argued that “digitalization isn’t a new obligation for business, but COVID-19 has made it more urgent, and it is expected that the post-COVID-19 era will engender new challenges and opportunities and rapid trend for digitalization.” According to Mouloudj et al. (2023, p.116), “mobile health apps have been widely considered in the healthcare sector as innovative channels to reach patients and their families.” Teledentistry, also known as “telehealth in dentistry”, refers to “a combination of telecommunications and dentistry involving the exchange of clinical information and images over remote distances for dental consultation and treatment planning” (Jampani et al., 2011, p.37). It is also defined as “using telecommunication to exchange dental information, images, and video over extensive distances in order to consult with a specialist, either by patients or by other oral care providers” (Alabdullah et al., 2020, p. 2). In this research, we define teledentistry as dentists’ use of digital technology to provide their services to patients remotely, such as consultation, diagnosis and treatment. Therefore, methods used in teledentistry include “electronic health records, electronic referral systems, digitizing images, teleconsultations, and telediagnosis” (Khan & Omar, 2013).

In the field of digital health services, influencing factors mainly include psychological variables, external variables, and demographic variables. Mouloudj et al. (2023) researched the intention to use digital health apps and found that “perceived usefulness, attitudes, perceived self-efficacy, and perceived ease of use” have significantly effects on Algerian consumers’ intentions towards using health apps. In their literature review, Yeo et al (2022) found that factors influencing the digital contact tracing apps adoption during the COVID-19 crisis include technical factors, social factors, political factors, health concerns, and cultural factors. Bahanan and Alsharif (2023) investigate the intention to use teledentistry. Their results revealed that perceived risk had a negative effect on intentions to adopt teledentistry. Another study by Amin et al. (2022) concluded that patient’ intentions to use telemedicine can be directly affected by “performance expectancy”, “information quality”, and satisfaction. However, the adoption of teledentistry has many barriers, including operational cost (Fahim et al., 2022), and poor internet connection and violation of privacy and confidentiality (Aboalshamat et al., 2022). In this context, Tan et al. (2021) stated that although teledentistry services are beneficial for the elderly,

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