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

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

Smail Mouloudj
 https://orcid.org/0000-0002-7390-6175
University of Medea, Algeria & 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.

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,

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/elderlys-intention-to-use-teledentistry-services/335312

Related Content

The Occlusal, Neurological, and Orthopedic Origins and Implications of the Hypersensitive Dentition
Nick Yiannios, DDS (2020). *Handbook of Research on Clinical Applications of Computerized Occlusal Analysis in Dental Medicine (pp. 699-828).*
www.irma-international.org/chapter/the-occlusal-neurological-and-orthopedic-origins-and-implications-of-the-hypersensitive-dentition/233659

T-Scan 10 Recording Dynamics, System Features, and Clinician User Skills Required for T-Scan Chairside Mastery
Robert Anselmiand Robert B. Kerstein, DMD (2020). *Handbook of Research on Clinical Applications of Computerized Occlusal Analysis in Dental Medicine (pp. 130-223).*
www.irma-international.org/chapter/t-scan-10-recording-dynamics-system-features-and-clinician-user-skills-required-for-t-scan-chairside-mastery/233651

Employing the T-Scan/BioEMG III Synchronized Technologies to Diagnose and Treat Chronic Occluso-Muscle Disorder
Robert B. Kerstein, DMD (2020). *Handbook of Research on Clinical Applications of Computerized Occlusal Analysis in Dental Medicine (pp. 362-514).*
www.irma-international.org/chapter/employing-the-t-scanbioemg-iii-synchronized-technologies-to-diagnose-and-treat-chronic-occluso-muscle-disorder/233655

Adding Technology to Diagnostic Methods
John C. Radke, BM, MBA (2017). *Oral Healthcare and Technologies: Breakthroughs in Research and Practice (pp. 249-312).*
www.irma-international.org/chapter/adding-technology-to-diagnostic-methods/178987

Phytochemicals: Their Therapeutic Potential Against Dental Caries
Karthikeyan Ramalingamand Bennett T. Amaechi (2019). *Computational Techniques for Dental Image Analysis (pp. 238-275).*
www.irma-international.org/chapter/phytochemicals/216052