

Telegram Messenger: A suitable tool for Teledentistry.

Telegram Messenger:
Una herramienta adecuada para Tele-Odontología.

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The concept of Teledentistry started after Telemedicine at the beginning of the 20th Century. Facebook Messenger, WhatsApp, Google Hangouts, ICQ, iMessage, and recently Telegram Messenger, are some of the most popular instant messaging communication softwares that can be applied in Teledentistry. Motivated by the benefits that Teledentistry can provide to the dental guild, we aim to describe the advantages and characteristics of Telegram Messenger. This particular tool may be the most suitable software given its advantages and features described herein. Finally, this software platform available for Android, iOS, and Desktop. The system allows a significant number of users in channel and groups providing globalization of information, research data, and media files that add to the body of knowledge and good practices resulting in better quality of life for oral and maxillofacial patients.

Telemedicine technology has its roots at the beginning of the 20th Century for emergencies cases, and was later used in the international space stations.¹ Posteriorly, those concepts evolved and entered the dentistry field. Dental medicine, in combination with telecommunication technologies and the internet, has yielded an exciting field that has endless potential, and is commonly known as Teledentistry.² This concept has a few branches such as Telestomatology, Teleradiology, Telepathology, Teleoral surgery, and Teleorthodontics.³

The use of technology through smartphones, personal computers (PC), and other electronic media used in our daily life has become in a regular practice. Technology today is seeing a paradigm shift towards better inter-professional communication, which can help doctors, patients, and the population as a whole.^{3,4} Remarkable advances have been made in the use of computers, telecommunication technologies, digital diagnostic imaging services, and specialized hardware and software for patient screening and follow-up; capabilities that were considered out of reach 20 years ago are now a reality in dental care.⁵

Since the introduction of social network sites (SNSs) such as MySpace, Facebook, Cyworld, and Bebo, millions of users have adopted these technologies, many of whom have implemented these sites into their daily practices.⁴ However, eventually those SNSs were blended with instant messaging chats (IMCh) that acknowledge a rapid communication between users with an interchange of files and media (video, pictures, and sound files) suitable for all users that employ them.⁶

Facebook Messenger, WhatsApp, Hangouts, ICQ, iMessage, and recently Telegram Messenger, are a few of the most popular IMCh that can be utilized

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in Teledentistry. The enrichment of knowledge that Teledentistry can provide to the dental community is a reality.

In this manuscript we describe the advantages and characteristics of Telegram Messenger (TM) that may turn it in a suitable tool to be used in Teledentistry.

Telegram Messenger

It is a messaging and VOIP (Voice Over Internet Protocol) application developed since 2013 by two brothers, Nikolái and Pável Dúrov. With a free multi-language access interface, it focuses on instant messaging, sending multiple files, and massive communication.

The main functions are: conversations between users (saved messages, forwarding, synchronization, hosting and archiving from the cloud), sending files (up to 1.5 GB, including documents, multimedia, and graphic animations), contact management (adding global search), surveys, calls, broadcast channels, groups, among others. In addition, users can develop bots that can perform other services such as payments, games, group moderation, or automation of tasks under artificial intelligence.

It is supported on Android and iOS systems, but can be used on desktop PC being compatible with macOS, Windows, GNU/Linux, Firefox OS, web browsers, and other operating systems.^{7,8}

Why Telegram?

TM provides a higher connection speed compared to other IMCh. Professionals can create channels and groups with a capacity for 200 000 users with a very efficient permissions system, a feature that other IMCh competitors do not have.^{3,4}

The global search system can be incorporated by using the related relevant keywords Channels or Groups of interest in sites. Available at: https://t.me/DENTISTRY_RESTORATION and <https://t.me/laodontologia>, for debate and sharing of academic dental information in Armenian, Russian, English, and Spanish.

Dental professionals can interchange PDF files (electronic books, papers, monographs, pre-prints, among others), media files like images or videos.^{4,7} Users can request protocols,⁵⁻⁹ techniques and ideas to resolve complicated or new cases in the field of restorative dentistry, oral pathology,⁵ surgery,⁸ orthodontics,¹⁰ or other fields in dental medicine.

The latest version can record video files and sent them instantly through the same software. The single limitation in structure involves the fact that, until now,

users cannot engage in video-chats like in other systems such as WhatsApp.

Dentistry, research, and Telegram

Researchers might create spots to interchange specific or global data. Scientific journals can develop channels or groups to interact with authors, editors, and readership; to inform about new papers published, as well as updates about guidelines and policies. Additionally, authors could have spaces to interact with editors and not wait for emails replies.^{1,4}

Revista Cubana de Estomatología (The Cuban Journal of Dentistry) is a scientific journal that has both a group and channel in TM, where editors and authors can share shortcuts and experiences in writing papers or management the of Open Journal System (OJS), in order to increase the quality of editorial publishing.

TM is a suitable software platform available for Android, iOS, and PC desktop. The system allows a significant number of users in channel and groups providing fast interchange of information, in the field of dentistry.

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