Teledentistry in Minas Gerais: current situation and challenge

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Date of Receipt: March 19, 2018 | Approval date: April 25, 2018

Abstract

The aim of this article was to evaluate the participation of professionals from the municipalities of the state of Minas Gerais in the Teledentistry project of the Faculty of Dentistry of the Federal University of Minas Gerais in 2016. The methodology consisted of the analysis of the project database. It reached 111 cities in the state, with 18 webconferences, with 974 participants and 442 teleconsultations. A virtual videolibrary was created with the edited webconferences and had, on average, 70 monthly accesses. It was concluded that to extend the participation, managerial directions of the professionals must guarantee the protected scheduled dates and times so that they access the permanent education's activities.

Keywords: Telehealth; Distance Education; Dentistry.

Teleodontología en Minas Gerais: situación actual y desafíos.

El objetivo de este trabajo fue evaluar la participación de los profesionales de los municipios del estado de Minas Gerais en el proyecto de Teleodontología de la Facultad de Odontología de la Universidad Federal de Minas Gerais, en 2016. La metodología consistió de la análisis de la base de datos del proyecto. Ello alcanzó 111 municipios del estado, siendo realizadas 18 webconferencias con 974 asistentes y 442 teleconsultorias. Uma videoteca virtual fue creada com las webconferencias editadas y tuvo, en promedio, 70 accesos mensuales. La conclusión fue que para alargar la participación, los administradores del servicio deben garantizar el horario de trabajo para los profesionales acceder a las actividades de educación permanente.

Palabras-clave: Telesalud; Educación a distancia; Odontología.

Teleodontologia em Minas Gerais: situação atual e desafios.

O objetivo deste trabalho foi avaliar a participação dos profissionais dos municípios do estado de Minas Gerais no projeto de Teleodontologia da Faculdade de Odontologia da Universidade Federal de Minas Gerais, em 2016. A metodologia consistiu da análise do banco de dados do projeto. Ele atingiu 111 municípios do estado, sendo realizadas 18 webconferências, com 974 participantes e 442 teleconsultorias. Uma videoteca virtual foi criada com webconferencias editadas e teve, em média, 70 acessos mensais. Conclui-se que para ampliar a participação, os gerentes do serviço devem garantir o horário de trabalho para os profissionais acessarem as atividades de educação permanente.

Palavras-chave: Telessaúde; Educação a Distância; Odontologia.

Introduction

The World Health Organization recommended, in 2005, investments in Information and Communication Technologies (TIC) to fortify the national health systems. Since 2006, the brazilian Health Ministry (MS) articulated a group in the health area that formulated and implemented the Brazil Telehealth Program. ^{1,2,3}

In 2001, the National Teledentistry Network (RNTO) was created with the goal to share successful experiences in teledentistry sponsored by the MS and by the Pan-American Health Organization. The support from both of these institutions provided RNTO's fortification while also allowing improvements in healthcare, in research and in dentistry teaching. 4,5

In 2007, nine telehealth centers were structured in Brazil, with the participation of public universities, whose objective was to qualify and support professionals that act in Primary Care in the Single Health System (SUS). ^{6,7} One of these centers was implanted in the Federal University of Minas Gerais (UFMG).

The Teledentistry project from the Dentistry College from Minas Gerais' Federal University (FAOUFMG) started in 2005, in a partnership with Belo Horizonte's Municipal Secretariat of Health. Afterwards, it was amplified to the municipalities of Minas Gerais state by the Telehealth National Program. In FAOUFMG there are three acting lines: Web conferences, Teleconsultancies and Virtual Videoteca.

The goal of this work is to analyze the activities developed by the Teledentistry project from the College of Dentistry of Minas Gerais' Federal University (FAOUFMG), in 2016, in the state of Minas Gerais.

Method

It is a descriptive and analytical study of the actions developed in the teleodontology project of FAOUFMG in the year 2016.

The UFMG's telehealth project, from which the teledentistry is part of, has a site, in which it is stored a database, with informations about the webconferences and teleconsultancies participants, from where the contents for this arti-

cle were extracted. In the virtual videoteca's site the participant's data was also consulted.

In the webconferencias the number of participants and of municipalities were surveyed month by month. The teleconsultories involve the following specialties: endodontics, periodontics, pathology, surgery / semiology, orthodontics, dentistry, collective health, and pediatric dentistry. The site of the virtual video library contains the edited webs where the data about the participants are consulted.

Results

Web conferences

Webconferences are biweekly. The state of Minas Gerais has 856 municipalities and it can be affirmed that the project reached mainly the small ones, next to the capital, according to Figure 1.

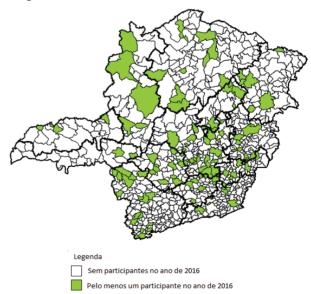


Figure 1. Minas Gerais municipalities with at least one professional participant from the web conferences held by UFMG's Teledentistry Project in 2016

Source: Health Technologies Center from the UFMG's Medicine College

Eighteen web conferences were held with 974 participants from 111 municipalities as Chart 1 shows.

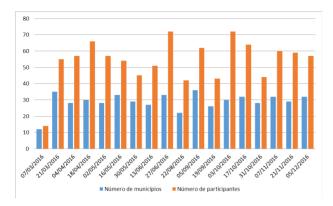


Chart 1: Number of participants and municipalities with at least one professional that accessed web conferences from UFMG's Teledentistry Project

Source: Health Technologies Center from UFMG's Medicine College

The monthly average of online connections was of 30 municipalities and 54 participants in each webconference as shown on chart 2.

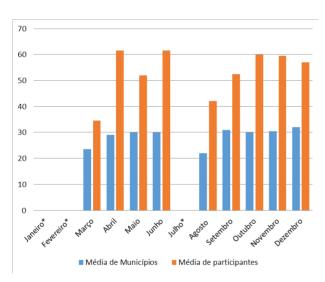


Chart 2: Monthly average of the number of participants and municipalities where at least one professional attended web conferences from UFMG's Teledentistry Project, 2016

Source: Health Technologies Center from UFMG's Medicine College

Teleconsultations

442 demanded Teleconsultations were held, directly to the teleconsultant of the area of interest, by a virtual page. There are eigth teleconsultants permanently registered.

The number of teleconsultations performed by area of knowledge are: surgery / pharmacology (145), Pathology / stomatology (83), Pediatric Dentistry (76), Periodontology (36), Endodontics (35), Dentistry (34), Orthodontics collec-

tive health (10).

Virtual Videoteca

The edited webconferences compose the Virtual Video Library that can be accessed, free of charge, at www.odonto.ufmg.br/teleodontologia. It was launched in 2016 with 15 video lessons aimed at professionals and students of dentistry organized in 25 areas of knowledge of dentistry. Each video lesson has an average duration of 35 minutes. The video library reached around 704 participants with an average of 70 accesses per month. The percentages of access by area of knowledge are: Oral and Maxillofacial Pathology (52.84%), Collective Health (13.78%), Emergencies and Emergencies (10.37%), Pharmacology (8.5%), Dentistry for (2.89%), Dental materials (2.55%) and Periodontics (1.28%).

Discussion

New TICs must be introduced in the teaching process but the question is how to adequate them to a political-pedagogical project that serves the students' training and update and professionals in a meaningful way and with other speed and effectiveness attributes ⁸. ICTs can enhance continuing education in health. ^{9,10}

The predominance of small municipalities among the web conferences participants is probably due to the fact that these have less resources to update knowledge such as courses and congresses.

The project presents a bigger reaching potential than what was observed. However, the municipalities representatives point out: the lack of available computers in the Basic Health Units, the non liberation of professionals to hold out these activities in working hours, the lack of knowledge about the project and difficulties to deal with new technologies.

The results of another study show the low use of telehealth and the need for training that includes sensitization, motivation, utility of the system and ease of use as a way to improve its use. The results also show the potential of telehealth to reduce referrals and help solve the routine problems of primary health care professionals in remote municipalities.¹¹

Before these questions, the Videoteca can provide access to the contents due to the fact that video classes are asynchronous.

Conclusion

To optimize the participation of professional in the project it is important to invest in dissemination mechanisms and also, to guarantee protected working hours so that they can have access to the permanent education activities.

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CONFLICT OF INTERESTS:

There is no conflict of interest.