Telehealth in Brazil: Contemporary Tool for Access to Health

Thais Vieira Esteves[a] and Sérgio Pacheco de Oliveira[a]

[a] *National School of Public Health, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil.*

Abstract

This work raises questions about telehealth in Brazil, especially the areas of diagnosis, treatment and monitoring at distance, emphasizing its importance for the improvement of health conditions. It was based on a literature review. Three successful experiences were selected as examples: The Minas Gerais Project Telecardio, the São Paulo University Teleaudiology and Telerehabilitiation of UnB. Despite the increase of telehealth experiences in Brazil, much remains to be done in regard to diagnosis, treatment and follow-up, with potential positive effects on health.

Keywords:

Telehealth; Diagnosis; Treatment ; Monitoring.

Introduction

Internet technology has produced impacts on society and therefore, in health. The telehealth field, where communication for healthcare technologies is incorporated, is an important example for our country, due its geographical size and inequalities of distribution of health care resources. This study is a literature review that aims to show the level of development of telehealth in Brazil, focusing on experiences related to diagnosis, treatment and monitoring.

Materials and Methods

A literature search was conducted using the PubMed, SciELO and Scopus databases. The search terms were "internet" and "health," using the free form, selected for all levels, from 2010 to 2014. We found more than 200 articles and by reading the titles, we selected 73 texts for a full-content review. We observed just a few experiences in diagnosis, treatment and follow-up in Brazil. We selected three successful experiences to demonstrate the advances and challenges in the area.

Results

In the late 80s, telehealth began in Brazil, mainly at universities and research centers, increasing access to health care for residents of remote areas and reducing inequalities of health services. In 2010, the Ministry of Health created the Telehealth Program Brazil, which was redefined and expanded in 2011 with the goal of supporting the consolidation of the Health Care Networks in SUS. Although we have in Brazil, just a few experiences of diagnosis, treatment and follow-up, this paper selected three successful experiences as examples of improvement to the Brazilian heath system.

The Telecardio Project implemented a low cost telecardiology system in the small cities of Minas Gerais state. This enabled diagnosis in cardiology support for primary care physicians and improved referrals of complex cases, in addition to assisting the permanent education of municipalities' professionals. Today it is a permanent government program in the state of Minas Gerais.

The experience in Teleaudiology from São Paulo University was characterized by adapting individual hearing aids at distance. It was observed that in addition to adaptation, it allowed the training and preparation of professionals from a remote center using a specific hearing amplification software.

The Brasilia's University Telerehabilitation investigated the use of Internet for people with spinal cord injury. It proposed the improvement of care in rehabilitation services routines using the Internet as a tool for the well-being of patients.

Conclusion

Despite the growth of telehealth practices in Brazil, a lot still needs to be done. Telehealth is an important tool to support health actions, facilitating access to early diagnosis and decreasing the time to start of treatment, so the prognosis of the disease tends to be improved and the health cost decreased. On the other hand, Brazilian telehealth requires more infrastructure investment and stimulus as shown by the success cases, for early diagnosis, treatment and follow-up at a distance.

References

[1] Nepal S, Li J, Jang-Jaccard J and Alem L. Case study: a Framework for Telehealth Program Evaluation. Telemedicine and e-Health 2014: 20 (4): 393-404.

[2] Ribeiro ALP, Alkmim MB, Cardoso CS, Carvalho GGR, Caiaffa WT, Andrade MV, Cunha DF, Antunes AP, Resende AGAR and Resende ES. Implantación de um Sistema de Telecardiología em Minas Gerais: Proyecto Minas Telecardio. Arq Bras Cardiol 2010: 95(1): 70-78.

[3] Penteado SP, Ramos SL, Battistella LR, Marone SAM and Bento RF. Remote hearing aid fitting: Tele-audiology in the context of Brazilian Public Policy. Int Arch Otorhinolaryngol 2012: 16(3): 371-381.

[4] Rodrigues MPC and Araujo TCCF. Internet as a Support for People with Spinal Cord Injuries: Usage Patterns and Rehabilitation. Paidéia 2012: 22(53), 413-421.

Escola Nacional de Saúde Pública. Rua Leopoldo Bulhões, 1480. Manguinhos, Rio de Janeiro, Brazil. CEP: 21041-210.

E-mail: thaisesteves@fiocruz.br