
TELEGERONTOLOGY: KNOWLEDGE EXCHANGE RELATED TO ELDERLY HEALTHCARE BETWEEN BRAZILIAN AND PORTUGUESE UNIVERSITIES

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Abstract

Telegerontology (TeleGero) is one of the educational activities promoted by the eHealth Lab/MicroG, in co-operation with the Postgraduate Course in Gerontology and Geriatrics at PUCRS. This initiative began more than 10 years ago through videoconference connections, aimed at publicising the activities of different Brazilian teaching and research centres in the area of geriatrics and gerontology. A total of 6 Brazilian states (São Paulo, Rio de Janeiro, Amazonas, Rio Grande do Sul, Pernambuco, Paraná) and Portuguese educational institutions participate in TeleGero, all linked through a server. The thirteen representative members, doctors/professors and other collaborators promote interaction between the Brazilian and Portuguese universities. This work occurs on a monthly basis, from January to November, with lectures focused on topics related to care of the elderly, and based on scientific projects and clinical experiences. A mediator guides group discussions in the videoconferences and time is set-aside during the presentations for questions to the speaker, resulting in greater interaction between the Brazilian and Portuguese participants. Researchers from the engineering area, who are part of the eHealth Lab/MicroG, provide specialised technical support for the videoconferences. The communication system consists of a computer connected to the internal network of PUCRS (intranet) and Teleport Software, connected to peripherals (microphones, sound system and video camera), which guarantees a secure and dynamic connection between the research groups.

Keywords: telegerontology; videoconference; elderly health; eHealth

Introduction

New information technologies have facilitated an ever-increasing exchange of data across the Internet, with the advent of high-speed networks in Brazil. Telemedicine has used this evolution to transmit information between geographically distant points, enabling the provision of quality care, carried out by a specialist, to reach remote areas and those with few resources.¹

The MicroG Centre, of the Pontifical Catholic University of Rio Grande do Sul (PUCRS), has been developing Telehealth research, academic and assistance activities in remote cities for a number of years, involving the areas of Telecardiology, Teleodontology, Teledermatology and Telepharmacy. As part of the Telehealth initiatives, a TeleGero project covering the areas of Geriatrics and Gerontology was also founded, involving the participation of professors, undergraduate and graduate students, and health professionals from several Brazilian and Portuguese Universities and research institutions.²

The objective of this paper is to present and discuss the MicroG TeleGero project, first established in 2013, through collaboration between the eHealth Lab of the MicroG and the Institute of Geriatrics and Gerontology of PUCRS.

Methods

The main activity of the TeleGero project is based on lectures and videoconferences that occur once a month between January and November of each year. The lectures focus on topics related to elderly healthcare and are based on the scientific projects, professional expertise and clinical experiences of the participant Universities.

The monthly virtual meetings occur in a videoconference room at the Sao Lucas Hospital, PUCRS, which is equipped with a telecommunication system provided by the eHealth Lab of the MicroG. The

main goal of this system is to guarantee a complexity of healthcare, decreased availability of financial resources, and with more people reaching secure, high quality and dynamic virtual connection between the research and academic groups that participate in the videoconferences.

The telecommunication system is formed of a computer, video camera, speakers, microphone, and data projector. The computer is linked to the intranet of PUCRS and the connection software used is TELEPORT, which performs the setup of the visual and sound communication system in order to connect the Universities involved in a virtual meeting, following the specifications provided by the software manual.

A mediator is selected for each meeting to guide group discussions and organise the question-and-answer session, allowing better interaction between the Brazilian and Portuguese participants. Professors, researchers and students from the engineering and IT areas, who are part of the eHealth Lab/MicroG, provide specialised technical support during the videoconferences.

Results and Discussion

Brazilian Universities from a total of six different States (São Paulo, Rio de Janeiro, Amazonas, Rio Grande do Sul, Pernambuco, Paraná) and Portuguese educational institutions participated in the MiroG TeleGero Project in 2016. There were thirteen representative members in the videoconferences, including health professionals and professors, who were responsible for organising and conducting the virtual interaction between the Brazilian and Portuguese Universities. Eleven meetings took place from January to November on a monthly basis.

Lectures were focused on topics related to elderly healthcare and were based on scientific projects, professional expertise and the clinical experiences of the participants. As an example, the challenge of therapeutic adherence of elderly patients was a topic deeply discussed in one such meeting, which gave graduate students from the Gerontology and Geriatrics programme at PUCRS the opportunity to share and gain information related to this very important and relevant theme (Figure 1).

The provision of good quality healthcare for the elderly in any society is of the utmost importance. However, this has become a huge challenge for many



Figure 1. MicroG TeleGero Project – an example of a videoconference, including four different Universities.

countries around the world, with the increased the age of 80 years.³ Therefore, TeleGero can be seen as a useful, cost-effective and user-friendly tool, strengthening actions directed at care of the elderly through the dissemination of scientific and technical information to healthcare-related professionals, academics and administrators.^{3,4}

Data transmission and telecommunication systems have evolved tremendously over recent decades. This has positively impacted on the establishment of telemedicine and eHealth projects worldwide. The TeleGero Project forms a part of this very progressive and welcome interaction between the medical and related areas with information technology. Societies in many countries have benefited from telemedicine programmes, and its application to the healthcare of elderly populations can improve the quality of life of geriatric patients.

Conclusion

The communication, interaction and knowledge exchange between healthcare researchers, professors and students from different universities and educational institutions working in the area of geriatrics and gerontology is seen as the main result obtained by the TeleGero Project of the MicroG, PUCRS. This project has promoted the updating of health professionals involved in the care of the elderly with the advent of new techniques, specialised medical exams, innovative therapies, and the physical and psychological management of geriatric patients.

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Conflict of interest. The authors declare no conflicts of interest.

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