Original articles

Telespeech therapy as a continued education strategy in primary health care in the state of Pernambuco, Brazil

Telefonoaudiologia como estratégia de educação permanente na atenção primária à saúde no estado de Pernambuco

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ABSTRACT

Purpose: to describe the implementation and level of satisfaction of users on tele-education actions related to the health of human communication.

Methods: an experience report that involved ten sessions of web conferencing seminars in the Telehealth Center in Pernambuco. The target audience was composed of professionals who work in Primary Health Care. Data collection was conducted through a structured interview by telephone with the seminar participants. The following variables were considered: thematic of the sessions, the average of connected points, the participating municipality, professional category and level of satisfaction of the participants. Data were analyzed by simple frequency and arithmetic average.

Results: the average of points connected in the ten sessions was 3.77. Practitioners from the nursing, medical, speech-language areas and technical level professionals (Community Health Agents) participated. 100% of the subjects regarded the themes as very interesting, and relevant to their profession. All of them reported satisfaction with the tele-education actions.

Conclusions: the implementation of telespeech therapy in Pernambuco began by training the team, planning, offering and evaluating the actions of tele-education, focused on the health issue of human communication.

Keywords: Speech, Language and Hearing Sciences; Telemedicine; Primary Health Care; Education, Distance; Continuing Education

RESUMO

Objetivo: descrever a implantação e o nível de satisfação dos usuários sobre ações de tele-educação, relacionadas à saúde da comunicação humana.

Métodos: relato de experiência que envolveu a realização de dez sessões de seminários transmitidos por webconferência, em um Núcleo de Telessaúde de Pernambuco. O público-alvo foi composto por profissionais que atuam na Atenção Primária à Saúde. A coleta de dados foi conduzida mediante entrevista estruturada, via contato telefônico com os participantes dos seminários. Foram consideradas as seguintes variáveis: temáticas das sessões, média de pontos conectados, município participante, categoria profissional e nível de satisfação do participante. Os dados foram analisados por frequência simples e média aritmética.

Resultados: a média de pontos conectados nas dez sessões foi de 3,77. Participaram profissionais da área da enfermagem, medicina, fonoaudiologia e profissionais de nível técnico - Agentes Comunitários de Saúde. 100% do público considerou os temas muito interessantes, além de relevante à profissão. Todos referiram satisfação com as ações de tele-educação.

Conclusões: a implantação da Telefonoaudiologia em Pernambuco iniciou-se pela capacitação da equipe, planejamento, oferta e avaliação das ações de tele-educação, voltadas para a temática da saúde da comunicação humana.

Descritores: Fonoaudiologia; Telemedicina; Atenção Primária à Saúde; Educação a Distância; Educação Continuada

INTRODUCTION

The Family Health program was presented as a strategic priority to reorganize the health care model in the primary care. The Family Health Strategy (FHS) is operationalized by the implementation of the reference team, composed of professionals from different areas. These teams aim to develop health promotion and disease prevention, rehabilitation, health recovery and maintenance in the territory in which they are inserted [1,2].

The expansion and organization of services in Primary Health Care (PHC) enabled numerous advances related to health. However, some challenges are mentioned, such as the differences in quality of care provided by family health program; the difficulty in responding fully and extended to recent and archaic health problems that characterize the Brazilian population[3].

The Ministry of Health (MOH) established the National Telehealth Program in 2007 with the aim of developing health care to support actions, particularly lifelong learning, contributing to the changing practices of work[4]. In 2011, the National Program was named Telehealth Brazil Networks now in order to support the consolidation of the Healthcare Networks ordered by the PCH[5].

According to the World Health Organization (WHO) telehealth corresponds to the provision of services related to health care, where the distance is a critical factor, increasing the assistance and also coverage[6]. This initiative will develop actions to support health care and continuing education for PHC teams, focusing on education to work, from the perspective of improving the quality of care, the expansion of the range of actions, through the provision of Teleconsulting, Second Formative Opinion and tele diagnosis[7].

The complexity of each territory and feeling the need to respond in full to the population's health problems, the Centers of Support for Family Health (CSFH) were created to ensure continuity of care and entirety. CSFH are formed of professionals from different areas of knowledge, among them Speech-language therapy[8]. From this perspective, speech-language therapy was driven to align its practices and knowledge to the design of the expanded health model that focuses on analysis of the subject taking into account its entirety and specificities[9].

In an attempt to support and guide the professionals working in the PHC, the Federal Council of Speech-Language Therapy, through Resolution No. CFFa 427/2013[10], defined the practice of Telehealth in Speech-Language to the profession through the use of information and communication technologies, with which it can provide services in health as: teleconsulting, second formative opinion, teleconsultation, tele diagnosis, tele monitoring and tele-education.

Whereas the practices focused on the use of information and communication technologies are already a new device in favor of the professional of speech language therapy within the PHC, the present study aimed to describe the experience of deployment and user satisfaction level on tele-education activities related to the health of human communication in the state of Pernambuco.

METHODS

This is an experience report on the implementation of the project "Tele speech in Primary Health Care" by the Hospital of the Federal University of Pernambuco Telehealth Center (NUTES - HC-UFPE). The project was approved by the Ethics Committee of the Federal University of Pernambuco, Protocol 50782015.7.0000.5208.

The NUTES was established in 2003 and since then is funded by the MOH. In 2007, along with eight Brazilian universities, created and joined the now called Telehealth Brazil Networks Program, MOH. This network consists of telehealth centers that offer of Telecare services, remote management and tele-education points telehealth, especially in PHC units [11].

The study of the audience was made up of professionals who work in the FHS and CSFH of 90 municipalities assisted by NUTES-HC-UFPE. Data collection was performed from January to May 2016.

To better understand the methodological approach, it was decided to organize activities in two stages, namely: the deployment and satisfaction analysis.

At first there was the training of the work team and the processes and technologies involved in the execution of actions, followed by planning the provision of tele-education services and definition of themes, titles of the seminars and indicators for assessment of satisfaction.

The following variables were listed: themes covered in the sessions, seminars titles, average points connected per session (the number of computers connected to the web-room, where each point can accommodate more than one user / professional, depending on the physical space wherein said

electronic device is attached), work council and professional category of participants.

We chose to promote tele-education activities characterized by a cycle of web conferencing seminars (ten sessions). The diffusion of the sessions took place by e-mail, the Regional Council of Speech Language therapy direct mail and the NUTES-HC-UFPE website containing information on the proposal, access and timing of sessions.

Access to sessions could occur through the following electronic devices connected to the internet: Laptops, Netbooks, Tablets, Desktops, Smartphones. All participants should be logged in at the scheduled time for the sessions, in health care facilities or other spaces.

The presentation of seminars was structured in PowerPoint format. The sessions were transmitted by web conferencing tool, with the help of Adobe® Acrobat® Connect ™ software (version 2.0), carried out in real time, with a maximum capacity for up to ninety-nine points connected simultaneously per session. The virtual audience was allocated on a web-room along with the session moderator and speaker.

Each session lasted approximately 60 minutes, 40 minutes on the theme of the exhibition and 20 for open questions using the chat mediated by a moderator that allowed the interaction between the audience and the speaker. Figure 1 illustrates the basic scheme that depicts the offer of distance educational activities, according to previously diagnosed needs[7].

In the second phase, after the sessions, considering the maximum lead time a week, a telephone call was made for the satisfaction survey through a structured interview developed by the researchers with nine questions, of which, three related to public profile (age, professional category and municipality of work) and six closed, multiple choice was made with the participants. Initially, it was explained the purpose of the research and requested the free and informed consent (sent by email). The following aspects were considered: level of satisfaction, interest in the topic, theme relevance to the professional qualification and recommendation of seminars for other colleagues.
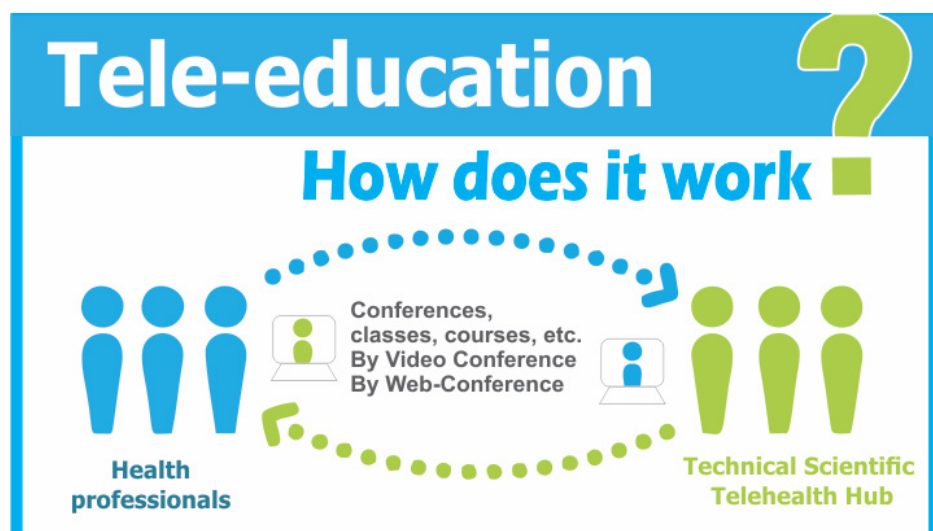

Figura 1

Data analysis was performed by creating the database that was built with the SPSS (Statistical Package for Social Science) version 19.0. In the treatment of the data was used descriptive statistical techniques involving obtaining the average of connected points. The other results will be presented in the form of tables and graphs.

RESULTS

As for implementation, it was noted that the training of the work team in relation to the processes and technologies involved in the execution of the actions was fulfilled by offering an onsite session, taught by an NUTES-HC-UFPE associate, for the team composed of eighteen individuals, being three volunteers of the

project, six students and nine teachers of the speech therapy course.

With regard to planning the provision of tele-education and defining the thematic axes, we chose to advocate the axes aimed both at promoting health communication in different life cycles, and the expansion to strategic populations, including worker's health, health of the person with a disability and public health. The details of titles and themes of seminars are described in Figure 2.

Seminar number	Thematic Axes	Title of the seminar
Seminar 1	Children's Health	"Linguinha" test
Seminar 2	Worker's health	Knowing and caring for the voice
Seminar 3	Disabled Person Health	Supplemental Alternative Communication
Seminar 4	Older Adult Health	Promoting Older Adult Health
Seminar 5	Children's Health	Eating habits and healthy development of communication
Seminar 6	Collective Health	Using genogram and eco-map in household care
Seminar 7	Older Adult Health	Speech-Language therapy in acquired neurological disorders
Seminar 8	Disabled Person Health	Hearing Health in Different Life Cycles
Seminar 9	Children's Health	Breastfeeding and the development of communication in childhood
Seminar 10	Collective Health	Oral hygiene in promotion of the communication health

Figure 2. Distribution of axes and thematic seminars in speech offered by the Web Conferencing Network NUTES, Pernambuco, 2015

The ten seminars were set to start the deployment of the Tele-speech therapy NUTES-HC-UFPE and were planned and taught by specialist professional, who indicated the most relevant issues for each thematic axis. Each session had the objective to consider the contributions of Health of Human Communication for work in the PHC. There was total of 38 points, representing an average of 3.77 points per conference session (Table 1).

Table 1. Distribution of the number of points connected by seminar session, Pernambuco, 2015

Seminar number	Number of points connected by session
Seminar 1	10
Seminar 2	3
Seminar 3	1
Seminar 4	2
Seminar 5	3
Seminar 6	9
Seminar 7	3
Seminar 8	1
Seminar 9	5
Seminar 10	1
Total points connected in all sessions	38

The municipalities in the state of Pernambuco who participated in the sessions were: Ibimirim, Jurema, Limoeiro, Abreu e Lima, Recife, Floresta. There was also the participation of a connected site in the state of Rio Grande do Norte. It highlights the significant participation of the city of Recife, among other municipalities. The details related to the amount of participants per municipality is described in Figure 3.
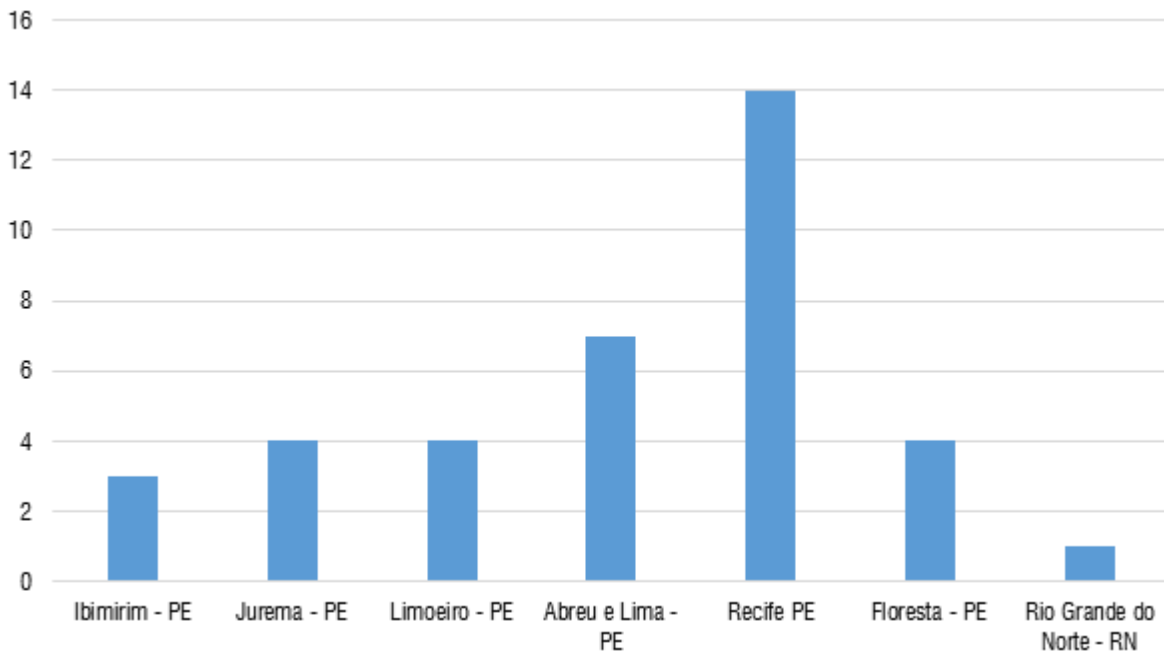

Figure 3. Distribution of the number of participants by municipality, in ten sessions of seminars, Pernambuco, 2015

Participants of the ten sessions were professionals of higher education in the areas of nursing, medicine, and speech-language therapy, technical professionals - Community Health Agents (46%), which accounted for the vast majority of the sample, according to the Figure 4.
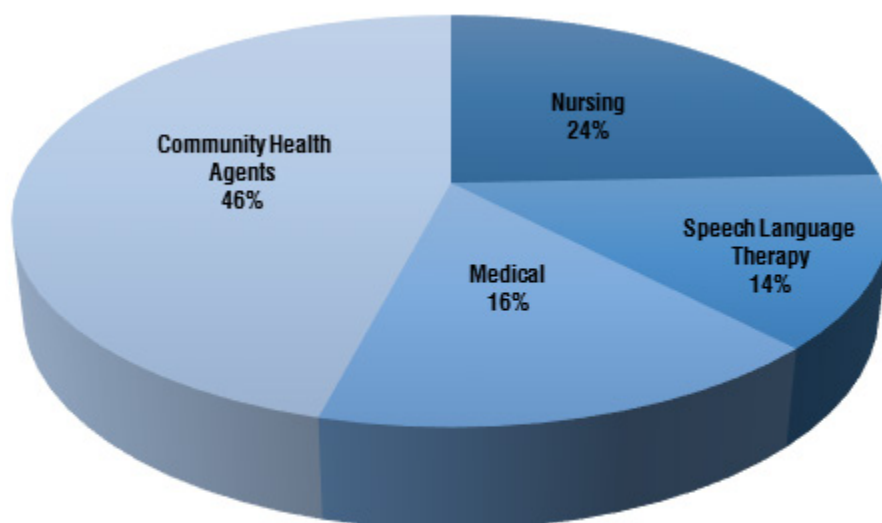

Figure 4. Distribution of participants of the ten seminar sessions according to the professional category, Pernambuco, 2015

As for the public satisfaction analysis, 100% of the participants considered the topics interesting, current and relevant and doubts and questions have been clarified. They reported that the contents of the seminars were important to their professional qualifications and demonstrated assurance for retention of the above theme. It is noteworthy that all professionals who participated in the sessions would recommend the workshops to their peers (Table 2).

Table 2. Distribution of satisfaction level analysis carried out with the participants of the seminar sessions, Pernambuco, 2015

Analysis of Satisfaction Level	Frequency	%
The topic		
Very interesting	37	100%
Good	-	
Reasonable	-	
uninteresting	-	
Current and relevant theme		
Yes	37	100%
Partially	-	
No	-	
Answering questions		
Yes	37	100%
Partially	-	
No	-	
Learning in the session		
Very important	37	100%
Important	-	
Little important	-	
Not important	-	
Assurance regarding retention		
Yes	30	81%
Partially	7	19%
No	-	
Recommends session		
Yes	37	100%
No	-	

DISCUSSION

Nowadays, the Telehealth has been applied in different ways according to the needs and tools involved; linking with health strategies as well as the expansion of information, contribute positively to access and / or improvement of health conditions in several segments[11-16].

Aiming to contribute to the strengthening of the work process of professionals working in the FHS and CSFH, was incorporated into the NUTES-HC-UFPE, through the project Telehealth Nucleus Network – NUTES network, the project "Tele speech therapy in Primary Health Care ", taking as a guideline the development of telehealth actions for the issue of human communication health in different life cycles.

Godoy, Guimarães and Assis[17] reported that, in fact, health education promotion mediated by the Internet consolidates more and more as an effective practice, in which information technology provides an opportunity to reduce geographic barriers and extent of the care process practiced in large cities, where specialized services are located.

In order to cover various health care specifics was recommended the organization of themes focused on the promotion of health communication in different life cycles.

For Lima, Vilela and Silva[9], organize health care from the life cycles favors the construction of safe care flows, ensuring the subject to full attention to their needs. In this perspective, the work requires broader professional activity, with interdisciplinary character.

So the work focused to life cycles requires, in addition to changes in individual professional practices, changes in processes and organization of health care systems and is necessary to explore new alternatives, such as using true articulated care networks [9].

The themes that involve the health of children and the older adults were included in almost all sessions. With regard to children's health, health promotion has been a priority for the strengthening of this line of care[18]. Regarding to the health of older adults stands out the creation by MOH in 2002, mechanisms for organization and implementation of State Networks Assistance to Older Adults Health, composed of general hospitals and referral centers in Health Care of older adults[19].

Thus, the training actions, with a view to promoting health in both life cycles, mediated by information and communication technologies, are effective tools for spreading knowledge in the training of professionals aims to expand the playing field and qualify their actions, thus contributing to construction of a link between professionals and users [20,21].

We chose also to broaden the themes of the seminars in order to guide the health care professional with strategic populations, including worker's health and the health of the disabled person. With respect to working with strategic populations, it stands out that health care should be organized on a regional basis, as a macro strategy for structuring articulated and cooperative networks in delimited territories[22].

In this context, the actions of health must have as its starting point the care organization in strategic and / or priority areas, and the FHS as the axis for the expansion and qualification of the PHC, with emphasis on completeness of care[23].

Silva et al.[21] emphasize that the constant changes taking place in the health sector show the need for a new type of professional with ability to learn and adapt to new situations. Thus, the work outlined in continuing education can be considered a way of contributing to the quality of health services.

Thus, it can be understood that lifelong learning is a necessity for the development of a critical, self-assessed and self-management of health professionals, promoting adjustments in the perspective of

interdisciplinary work, exchange of knowledge and on-site know-how, continually [21].

Garcia and Baptista[24] point to the importance of information and communication technologies in lifelong learning process and claim that the work mediated by remote technologies extend the capillarity possibilities of formation and dissemination of information and knowledge.

In this study, there was a low level of average points connected by the conference session. The mode requires skills for using virtual tools, so it is necessary instruction by developing skills for assimilation of new technologies[25,26]. One might think that these implications and the problems of Internet connectivity have reflected in this result.

Although the project has been created in order to offer tele-education activities in the State of Pernambuco, has expanded the scope of the participation of professionals in other states, which reflects the range and importance of health information and communication technologies, where resources such as web conferencing can provide the dissemination of knowledge in various regions, thus contributing to the improvement of PHC professionals through continuing education actions [17].

In fact, one of the biggest challenges of telehealth is the involvement of professional teams, either by little affinity with technologies for connectivity problems or because they have not built this routine in their work practices. However, it is noteworthy adhesion of certain professional categories, such as Community Health Agents (CHA), considered the category that most uses Telehealth services [26], which was confirmed in this study.

There was low participation of speech-language pathologist in the seminar sessions. On this issue, it is emphasized that the role of the speech-language pathologist in Telehealth is a still recent practice, it needs to be widely disseminated. Moreover, the insertion of speech-language professionals in the PHC has little expression.

It is noteworthy also that the qualification of the work developed by a speech-language therapist at this level of attention when mediated Telehealth can help minimize and give referrals to other health care network services. Thus, the tele-education initiatives can fill in some gaps in health care and enable the multiplication of information to produce knowledge on the health of human communication.

Results show that, despite the small role of speech therapy in the tele-education work routine, the possibility of this professional qualification under the PHC. It was evident the contribution that this practice brings to reduce unnecessary referrals, since the exchange of information and experience among professionals enhances the development of extended clinic.

With regard to satisfaction, all participants considered the interesting themes, emphasizing that were addressed current and relevant way, and their doubts and questions clarified, feeling assurance of retention of the above theme.

According to Diniz, Sales and Novaes[27] tele-education practices bring many benefits, being widely used in recent years. Oliveira[21] adds that this tool is an important alternative to improve the access of workers of the Unified Health System (UHS) to lifelong learning by allowing the professional practice of reflective theoretical discussions, based on the needs of the population involved.

Corrêa et al.[28] consider that this type of education capable to build and rebuild their conceptions and practices from the perspective of continuing education in health, should allow develop critical skills of workers.

Similar data on the positive levels of satisfaction were obtained by Novaes et al. (2012) [29] by working the tele-education in mental health perspective. The authors found that 97% of participants approved the actions and stressed that the strategies discussed in the web conferencing seminars contributed to the development of their professional activities.

CONCLUSIONS

The project implementation process was characterized by staff training, offer planning of tele-education services and definition of themes, setting up the implementation of the web-series of seminars on health of human communication. There was poor adhesion of connected points with the participation of Pernambuco and Rio Grande do Norte municipalities. In addition to the speech-language therapists, other professionals participated, and the CHA category with the largest representation.

As for the public satisfaction of the analysis, it was observed that all participants considered the themes interesting and the lessons were very important to their professional qualification, generating high level of satisfaction.

Thus, it is considered that the tele-education initiatives aimed at the issue of health of the human communication are an active instrument of spreading the knowledge that can strengthen the process of continuing education of professionals working in PHC.

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