

Analysis of national publications on distance education in health field

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ABSTRACT

The distance learning has been considered as a positive strategy for professional qualification in Brazil. Due to the need of constantly updating the skills of the health field professionals, the purpose of this study is to list and analyze national publications about distance education in this field, seeking to know the areas that most offer this modality in Brazil and the benefits of distance education to these professionals. This work is a literature review of articles through searches the virtual database Bireme, looking for the ones containing themes related to management, participation and health education. Eight scientific articles published in Brazil were selected. It was concluded that there is a multidisciplinary practice when it comes to offer and compliance to professional training courses in distance education modality. This group is composed by doctors, nurses, dentists and staff members of the Estratégia de Saúde da Família, from SUS, allowing qualification and skill upgrade of these professionals as well as providing improvements in care to brazilian population in areas with precarious health care.

Keywords: Distance Education. Health.

RESUMEN

La educación a distancia (EaD) ha sido incluida como una estrategia positiva para la calificación profesional en Brasil. Con la necesidad de una actualización constante de los profesionales sanitarios, nació el propósito de este estudio de enumerar y analizar las publicaciones nacionales sobre la educación a distancia en la asistencia sanitaria, buscando conocer cuáles son las subáreas de la salud que más ofrecen esta modalidad en Brasil y cuáles los beneficios de las propuestas de educación a distancia para estos profesionales. Se trata de una revisión de la literatura mediante búsqueda de artículos científicos de la Biblioteca Virtual en Salud -Health (Bireme), respeto a temas de gestión, participación y educación para la salud. Se seleccionaron ocho artículos científicos publicados en Brasil. Se concluye que existe una práctica multidisciplinar cuando se trata de la oferta y la adhesión a cursos de formación profesional en la modalidad de educación a distancia, estando compuesto este cuerpo de trabajadores por médicos, enfermeras, dentistas y miembros del personal de la Estrategia Salud de la Familia, del SUS, lo que permite la calificación y la mejora de la calidad de estos profesionales,

así como proporciona mejoras en la atención a la población en zonas de atención precaria de la salud.

Palabras clave: Salud. Educación a distancia.

RESUMO

A educação a distância (EaD) vem sendo incluída como uma positiva estratégia para qualificação profissional no Brasil. Com a necessidade de atualização constante dos profissionais da área da saúde, nasceu a proposta do presente estudo de elencar e analisar as publicações nacionais sobre EaD na referida área, buscando conhecer quais são os as subáreas da saúde que mais oferecem essa modalidade no Brasil e quais os benefícios das propostas a distância para estes profissionais. Trata-se de uma revisão de literatura por meio de buscas de artigos científicos na Biblioteca Virtual em Saúde (Bireme), contendo temas de gestão, participação e educação em saúde. Foram selecionados oito artigos científicos publicados no Brasil. Conclui-se que existe uma prática multidisciplinar em se tratando do oferecimento e da adesão aos cursos de capacitação profissional na modalidade EaD, estando composto este corpo de trabalhadores por médicos, enfermeiros, odontologistas, além de membros da equipe de Estratégia de Saúde da Família, do SUS, o que permite qualificação e atualização de qualidade para estes profissionais, além de proporcionar melhorias no cuidado à população brasileira em áreas com precariedade de assistência à saúde.

Palavras-chave: Educação a distância. Saúde.

INTRODUCTION

The distance education (DE) has been included as a new and positive strategy to train professionals in Brazil (Martins-MELO et al., 2014).

Health area courses with distance education mode arise as an opportunity to update and training to health professionals, as many of these professionals do not have time to carry out a classroom course or live in remote areas of Brazil's capital, where such courses are offered in more (Martins-Melo et al., 2014).

The precision to create a new professional profile to face the national health problems along with the need for education and training of these workers in the most remote regions of the country, places the distance education as a strategy facing the challenge of consistency of new pedagogical models that contribute to transforming proposals of reality by accepting new models of knowledge and learning (MARTINS-MELO et al., 2014).

It is believed that continuing education is an opportunity for health workers to build a critical, self-assessment, self-education, self--management, and promote the required adjustments in order to work with interdisciplinarity through the exchange of knowledge (OLIVEIRA, 2007).

With the need for constant updating of these professionals to deal with the population's health problems, is born the idea of this study to list and analyze national publications about distance education in healthcare, seeking to know what are the subareas that most offer this modality in Brazil and the benefits of the proposals in distance to health workers.

It is believed that, with distance education, this new act on education will lead health professionals to develop a continuing competence through cooperation, participation, responsability, decisiveness and intervention.

1. THEORETICAL FOUNDATION

1.1. Distance education

The current society experiences in all areas, a number of changes due to the evolution of integrated set of technological resources among themselves, which occur with increasing speed the production and circulation of information and present challenges to education in the face of an information economy conforms to the global world infrastructure, interconnecting the "network society" (MORIN, 1998).

Globalization involves: communications, markets, capital flows and technology, socialization and exchange of information which require the dissolution of boundaries. It experiences a transition period from one reality to another: the historical formation of society of industrial capitalism to another type of social organization, which is emerging as a network society. At all times to establish dialogue between the global and the local, homogeneity and diversity, order and disorder (MORIN, 1998).

Such characteristics are as challenges required to a new positioning of educational organizations to make front to education as individual and social process, from scientific and technological references to the inter / transdisciplinary, multi-referential and multicultural, and recognizing the student as subject of learning (Fróes BURNHAM et al., 2007).

The distance education has been included as a new and admirable strategy for the training of professionals in Brazil and it is revealed as a teaching-learning model through the use of technologies in which students and their tutors are physically distant but can communicate through the internet, using videos, and other resources (MARTINS-MELO et al, 2014;. MORAN, 2005).

The basic goal in distance education proposals is to request an independent learning. The language used is different because it seeks to emphasize independent and interactive pedagogical processes. Thus, the main function of the tutors is to motivate students so that they are encouraged and challenged in the pursuit of independence own wisdom and learning (Moran, 2005).

The distance education has gained prominence in Brazil and produced reflections on the ways of teaching and learning, democratization of education, collaborative knowledge production, the role of teachers and students, among others. There are several areas that offer this type of education, such as: exact, human and health (CAMACHO, 2009).

The expansionist policy of higher education, implemented in Brazil in recent decades, reflects the market requirements of and pressure from civil society groups to open new courses and, in this scenario, there is the possibility of higher education in distance mode (TEIXEIRA et al., 2013).

The implementation of professional training courses in its motion for distance education has been solidifying in Brazil as positive tactics to meet the accuracy of society in universal ticket to quality education (DUBEUX et al., 2007).

1.2. Distance education and health

The World Health Organization (WHO) conceptualizes health as a state of complete physical, mental and social well-being and not merely the lack of disease or infirmity (WHO, 1946).

Different technological resources, especially the internet, through their networks and virtual social communities, are powerful tools for communication and access to health information (WHO, 2001).

Brazil uses a National Telehealth Program, which has been used on a large global scale. It is defined as the distance health care (WHO, 2010), that can be beneficial in uneven scenarios: support the clinical determination, provide consultation and diagnosis in distance - telecare; offer education through classes or lectures conducted in real time, video or web conferencing, or asynchronously - tele-education, and benefiting the management of health services - telemanagement (MCLAREN, 2003). The tele-education, for example, is being highly aggregated to provide continued professional education, especially to distant communities located in large cities and capitals (NOVAES et al., 2012).

The Telehealth Brazil Networks Program recommends integration of Family Health Teams to universities to improve the quality of services offered in primary care, reducing health costs through professional development, reduction of unnecessary number of conveyances of patients and professionals and through the advancement of disease prevention activities. The works of adherence to health protection and the continuing education of health teams aim to education for service and technical changes that result in the quality in primary care (NOVAES et al., 2012).

The initiative involves graduate students, technicians in health, residents and postgraduates. This educational policy follows three guidelines: integration between universities and health services, expansion of the concept of the health-disease based on the social determinants of health and a new pedagogical approach grounded in active methods, including information and communication technologies (HADDAD et al., 2013).

2. METHODOLOGY

This is a content review through scientific papers searched particularly on the Virtual Health Library (Bireme), using the combination of the keywords: "distance health", without limiting the publication period. Scientific articles were included that provide

with available information in full text reading, published in Portuguese and in Brazil only, containing management, participation and health education themes. Articles that contained only the summary of the contents published in other countries and languages and do not treat the relevant research topic were excluded from the research. In addition, thesis and dissertations were also excluded.

3. RESULTS

Using for the search on Virtual Health Library (Bireme) the combination of keywords "distance health" and, with the filter "only publications in Portuguese", 210 publications have been found. Of these, after filtering by publications which texts were complete, 85 of them have been left. From this number, filtered by papers published in Brazil, the number decreased to 43 publications.

Of this number, only the papers related to the themes management, health education and participation, totaling 16 texts have been chosen. In order to conclude the search, we used the restriction filter "only scientific articles," and among these, monographs and theses have been excluded. So, the search was completed, reaching up to eight selected items shown in Table 1, in descending order of year of publication.

AUTHOR (S)/YEAR	CONTRIBUTIONS/CONSIDERATIONS
Junior, J.D. et al., 2014	Medicine: Teacher training / preceptors; Facilitation of continuing education; Develop- ment of national collaborative research.
Teixeira, E. et al, 2013	Nursing: Strong expansion in the number of distance learning vacancies.
Carvalho, M. S. et al., 2013	Multidisciplinary team: Powerful Distance Education to change the model of concern and the health care of the population in primary care.
Correia, A. D. M. S. et al., 2013	Dentistry: DE reveals itself as an important health care and educational tool for the support of oral health professionals in primary care.
Haddad, A. E. et al., 2013	Dentistry: DE to strengthen the category; Improvement of health care, research and education at the undergraduate and graduate programs across the country.
Lima, C. M. A. O. et al., 2013	Radiology: Improving health care quality; Reduces the time spent between diagnosis and therapy; Extension of specialized medical services to poor areas in assistance
Rangel-S. M. L. et al., 2012	Multidisciplinary team: DE allows interactivity and autonomy of public professionals of Bahia.
Novaes, M. A. et al., 2012	Mental health multidisciplinary team: DE accepted and approved by the family health team workers to develop the quality of their professional activities.

Table 1: Selected articles for analysis

DE: distance education.

4. DISCUSSION

Junior, J. D et al. (2014) reported the experience of the implementation and development of a Special Interest Group on Medical Education (SIGEM) as teacher development initiative and health professionals in Brazil. The SIGEM activities were initiated in the Federal University of Rio Grande do Norte. This initiative came from the need for integration and exchange of experiences among educators of health. The SIGEM can be accessed by Web conferencing from any location where available the World Wide Web, a fact that allows the open reception of online activity. There are several activities with the participation of different speakers and different institutions of higher education. The SIGEM is an unprecedented initiative in Brazil of teacher professional development, focused on improving the health education using a teaching tool distance, Telehealth Networks Brazil. It is observed growing interest in this initiative, a fact that corroborates other experiments reported internationally.

Carvalho, M. S., et al. (2013) analyzed how Brazil has sought to tackle a chronic problem in the SUS, which is the lack of doctors to work in public health services, especially in primary health care. To achieve this purpose, the analysis of the program's implementation named Valorization of Primary Care (PROVAB), following a policy of the Ministry of Health of Brazil since December 2011. It was observed that lifelong learning becomes strategic to change the work process and invest in care practices and proposes to articulate learning at work and from work, producing implications and commitments to change the work process and the needs of health. The incorporation of permanent education as a strategy to overcome the dichotomy teaching and service, reveals itself as a powerful device to change the model of care and the health care of the population.

Lima, C. M. A. O. et al. (2013) presented a review of the history of the introduction of Teleradiology in Brazil and described great experiences for tele-education. There was a major change in teleradiology in recent times due to the implementation of communication resources such as the Internet, advances in cost-effective computers, acceptance of communication technologies and image files, in addition to radiology management. The use of virtual resources offers advantages for radiologists, referring physicians, managers, environment and qualification in the care with patients. Current achievements in telemedicine and teleradiology change standards in lifelong learning, the modernization and professional recertification. Several actions are carried out by the Brazilian College of Radiology and the Brazilian Medical Association, specifically for designation in medical radiology in distance education mode. Teleradiology has proved to be a resource that contributes to the progress of medical support category, to reduce the time taken between diagnosis and

intervention, as well as to extend this specialized and quality care to regions with no or service deficits.

For Haddad, A. E. et al. (2013), dentistry gained strength in the SUS in 2000, when dentists began to integrate the Family Health Teams (FHT) at the level of primary health care and with the creation of specialized dental clinics in 2005. The inclusion dentistry in SUS created the need for undergraduate courses to better prepare students for a new standard of professional activity, enabling them to face the challenge of working with multidisciplinary teams and public services, not only in private clinics. To better integrate dentistry, was established in 2011, the National Network of Teledentistry, which the goal is to share successful experiences of telehealth applied to Teledentistry, nationally and abroad. The initiatives are articulated to the strengthening of the class, also contributing to the improvement of health care, for research and education at the undergraduate and the graduate Dentistry courses throughout the country.

In a similar line of research, Correia, A. D. M. S. et al. (2013) reported the experience of Teledentistry in Telehealth Brazil Networks Program in Mato Grosso do Sul, managed by the Health State Department. Presented data both teleconsultation as tele-education in dentistry actions, revealing the Teledentistry as a powerful tool for support for oral health in primary care. The results showed that in Brazil prevail asynchronous teleconsultation linked to oral health because there are still problems in remote areas with access to broadband internet. The registered professionals are dentists and oral health assistants, one expert at the Family health and other Dentistry for Patients with Special Needs and Pediatric Dentistry. In tele-education (conferences, classes and courses offered through the use of information and communication technologies), virtual seminars were held with the themes: Oral Health in the Family Health Strategy; Home Visit the Oral Health; Arterial

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hypertension and Oral Health; Diabetes on oral health; Oral Health Indicators in the National Program for Improving Access and Quality of Primary Care; Oral health of the baby; Center for Dental Specialties (CEO) and Regional Laboratory Prosthodontics (RLDP). The seminars are recorded and made available on the program website for reuse by professionals who were unable to participate in real time. Thus, Teledentistry has been an important charitable and educational tool for the support of oral health professionals in primary care in Mato Grosso.

Rangel-S, M. L. et al. (2012) They discussed the experience of the Specialization Course in Public Health: concentration Municipal Public Administration, held in an institution of higher education in partnership with the National Health System (SUS), in Bahia, for the qualification of the local health managers.Pedagogical strategies for distance education have been used in a context of profound social changes that require the higher education institutions the appropriation of information and communication technologies (ICT) and innovation in teaching and learning processes. The course has a workload of 360 hours and 247 subscribers, involving 39% of technicians who worked in municipal management, 7% of professionals working in SUS and 3% of professionals with experience and / or interest in the public health area. It sought to foster the ability to understand and discuss the situations experienced by managers and their teams, through their everyday actions articulated with the theoretical discussions in view of networked learning communities. Analyzing the performance of students, it can be said that approximately 16% of the course participants arrived at the course end presenting some strangeness with the participation model, and many of these could not feel at ease to do their studies through the virtual environment. However, several students have overcome the phase of estrangement, reaching some autonomy to dare, create, question. When it is building networks

of collaborative learning through learning processes, it can be said, from the experience reported, the potential of distance education, developed in an open model of participation and, above all, inviting interactivity and autonomy of the individuals.

Novaes, M. A. et al. (2012) presented implantation techniques and evaluation of a telemedicine application, or telehealth, the Mental Health Seminars for Web Conferencing, provided by Telehealth Nucleus Network Pernambuco (RedeNutes) connected to the Telehealth Brazil Networks program for family health teams . The virtual enclosure uses electronic displays used in presentations on mental health and materials that complement as texts, pictures and videos, advised by teleconsultants. Thus, the presentations induce strife on mental health; health teams interact with experts in the field; They have the skills of professionals and discuss the works and tactics in the Family Health Strategy. At the end of the presentations, the seminars were evaluated through a questionnaire found in the RedeNutes Virtual Learning Environment (VLE). The results showed approval and satisfaction of resources by the majority of participants who considered that the Mental Health Seminars contribute to the quality of the development of their professional activities.

CONCLUSION

It is concluded that there is a multidisciplinary practice when it comes to bidding and adherence to professional training courses in distance education mode, made this practice by medical fields, nursing, radiology and dentistry, as well as professionals of the Family Health Strategy Team, *SUS*. The distance learning mode is efficient for allowing qualification and quality upgrade for these professionals, as well as providing improvements in care for the population in areas with precarious health care, either through lifelong education, the development of collaborative national research, improving the quality of medical care, reducing the time spent between diagnosis and therapy, the extent of specialized medical services, and allow greater autonomy of health professionals.

It is suggested to further research on the topic in international bibliographies.

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