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PRODUCTION OF EDUCATIONAL TECHNOLOGY ABOUT SYSTEMIC ARTERIAL HYPERTENSION

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ABSTRACT

Objective: develop an educational technology (TE), hypertensive, guided listening to sensitive of this target audience. **Method:** This is an exploratory, descriptive research with qualitative approach, with theoretical basis in the theory of social representations. 80 hypertensive individuals were interviewed, including adults and seniors in a basic unit of the city of Belém do Pará with a screenplay by open-ended questions that guided the hypertensive participants express themselves through free association of words, choosing four important words of the inductors entitled care, health, illness/HAS. The data were processed in software EVOQUE and the analysis of content of Bardin. **Results:** The most cited for each inductor has been reviewed and deemed to be substantial for the production of serial album about a bingo game and the heart, health education for hypertension. **Conclusion:** Sensitive listening is the best way to break the traditional model of health education, because overrides the deposit model of knowledge by promoting moments of knowledge exchange between audience and health educators, generating meaningful results for the production of educational technologies.

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INTRODUCTION

Cardiovascular diseases (CVD) are among the leading causes of death in the world. In Brazil, enough to reach a 30% rate of deaths, there are more cases of death from these diseases than for any other disease.

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In addition, half of the deaths from CVD are related, directly or indirectly by hypertension (Malachias *et al.*, 2016). Hypertension (SAH) is defined as a systolic blood pressure greater than 140 mmHg and diastolic pressure greater than 90 mmHg, based on two or more measures. SAH is related to the risk of morbidity and premature mortality, it progresses with the elevation of blood pressure, and is constantly related to functional changes of major organs such as heart and kidneys, and may be exacerbated by risk factors: Dyslipidemia, age,

alcohol intake, consumption of salt, in addition to socioeconomic factors (Malachias *et al.*, 2016). According to a survey of Harvard Medical School in addition to the classic risk factors for Hypertension and cardiovascular disease stress, also related to intense working day, no set time to sleep and rest, so the appropriate occupations not sleep without periods of rest and stress are important factors for the development of these pathologies (Morris *et al.*, 2016). Obesity also stands out with a very important risk factor for the development of Hypertension. Where in the current century the epidemic of obesity and physical inactivity are high prevalence, related to modern life. When the machines are increasingly dominating the occupations that previously required physical effort, but also the food industrialization, less consumption of fiber and grain (Simonds *et al.*, 2014). Hypertension stands as an important public health problem in Brazil and in the world because of your high prevalence rate and low control. (MINISTÉRIO DA SAÚDE, 2013 – CAB 37). In Brazil 32.5% of adults and over 60% of the elderly are suffering with high blood pressure and your prevalence varies according to the population and the characteristics of the regions of the country. In this context, health education is considered a mechanism to deal with individual and collective situations that interfere with the quality of life through the provision of information on health, with the use of most advanced technologies or not (Salci *et al.*, 2013). The technologies are resources that can be applied to the promotion of healthy habits, through the development of knowledge in order to assist in the process of health disease (Souza, Moreira e Borges, 2014). Among the technologies include the assistance, which are used by professionals with customers-users of healthcare systems in the three levels of attention to mediate the process of care; the management, used to mediate the management processes within the various units and services health systems; and the educational, employed to mediate the processes of teaching and learning, used between educators and students in the various processes of education, by allowing systematic identification of development, organization or educational resource use and handling of this process (Teixeira, 2010).

Objective

To develop educational technology (TE), about hypertension, guided listening to sensitive of this target audience.

MATERIALS AND METHODS

Given this social and health context the research group educational practices in health and care in the Amazon (PESCA), the school of nursing Magalhães Barata (EEMB/UEPA), registered in the directory of research Groups CNPq, has conducted sensitive listening projects with different population groups with a view to production and validation of educational technologies to mediate educational practices in health in different contexts under municipal and State. The PESCA, developed a research project entitled multicenter "representations and health-disease information and care between network users SESMA/Belém-Pará: exploratory study II", which was financed by the Fundação de Amparo à Pesquisa do Estado do Pará (FAPESPA). In this project there have been eight sub-projects under the responsibility of the working groups (WG), which carried out the step of data production, named "listen sensitive" with users; one of the subprojects was with people met in a Basic Health Unit,

focusing on Hypertension, developed by WG if you take care with Arterial hypertension. The study was exploratory, descriptive qualitative approach, using as theoretical basis of social representations theory. The field research was conducted in the city of Belém do Pará, in a Basic Health Unit of administrative district of Guamá. Participated in this study 80 participants. Data collection occurred on the premises of the basic health unit, with users. Each participant answered a form containing open and closed questions, divided into two parts: Profile of the participant, health issues, disease/Hypertension and care (that guide the participants to express themselves through Free Association test of Words (TALP), choosing four important words about hypertension), and on General information. The Free Word Association test (TALP), can be worked to certain objects of research are extract of data that reveal fundamental wishes of respondents, significant traces of the history of life, the social representations of objects and phenomena (Tavares *et al.*, 2014). Data analysis was performed with the aid of the software EVOQUE that allowed to identify the profile of the participants and the core elements around the be hypertensive. The qualitative data were analyzed by means of the technique of content Analysis proposed by Bardin, (2016), from which identified the meanings of words evoked. The research relied on approval and opinion of the CEP (the ethics and Research Committee) of the Universidad do Estado do Pará (UEPA), with the numbering (Protocol 00643312.5.00005170). In accordance with resolution 466/12, on research involving human beings, all participants have signed two copies of the informed consent (TCLE), and each participant received a via. Respecting and explaining the risks and benefits of research. Maintaining the confidentiality of the data, which will be used only for the purposes of this research.

RESULTS

Participant's profile: It was found that 33% represent the age of 60-69 years ago, in which 54% are female. About schooling 63% studied until the 8th grade of elementary school. In relation to marital status 51% are married. 57% have monthly income of up to one minimum wage, most are retirees and the Catholic religion.

About health, illness and care in Hypertension: In this second part the participants should choose four important words about each term inductor, being 4 words to health, disease, and 4 care 4. So was parsed the words more words to each inductor. The first inductor, health, have been more spoken the words: well-being, Joy, healthy eating and physical activity. On the inductor disease, the more words used were: Sadness and malaise. For the inductor care in Hypertension, have been reported the words: healthy food, Medicine, and Medical control.

General Information: This corresponds to information about educational activities, if they would like to participate and what better place and turn for educational actions, and also what would you like to receive information on these actions. About if they had participated in any educational activity 61 percent never attended. So 81% showed interest in participating in an educational activity, and that 26% preferred on Monday, 54% choose educational actions that should be performed only once per week and 67% consider the morning shift more ideal for this type of event. The most cited at that time in the King's interest in actions directed to this were: Hypertension, cancer, Diabetes and health.

Production of technology: The Working Group of the Hypertension PESCA – GT/HAS, with its 7 members, met to develop educational technology based on the answers of the interviewees. At first, he designed and created a television series album whose theme is Hypertension: Let's talk about her? 05-Containing questions, what is health? What is disease? What is hypertension? What are the symptoms of high blood pressure? How to take care of yourself? The album contains illustrative sheets 06, with questions and answers. The answers were considered scientific evidence and also used words of the interviewees, to increase the degree of familiarity on the subject, example: a symptom of high blood pressure, "ringing in the ears", blurred vision. The second time he designed and created a game to complement the album serial, It was *the Heart Bingo*. Each bingo card has an illustrative title, a frame with 25 cells, each cell contains a word that answers the questions 05 album serial Hypertension: Let's talk about her? Yet there is an envelope with 5 questions to be drawn and another envelope with the answers. The game works like this: after the conversation with hypertensive with support of the album show, the hypertensive individuals will be invited to participate in a bingo hall. The speaker should distribute the cards to participants with hypertension, explain how the dynamic. Each of the questions 05 and read aloud, will be drawn a reply and read aloud to be marked on the card. Example: question 1, what is health? Reply drawn: tranquility (the word tranquility on the card, you should check), that player to complete a column or a row of color chart, will be the winner. Educational technology has been tested in a scientific event with participants and guests going on a successful application, because everyone understood the game and managed to get to the end of the activity successfully. The same is in the process of validation.

DISCUSSION

The results showed that the participants, in your most, have a significant interest in participation in educational groups. The words present in the Central cores suggest that the health and care of hypertension, consist of measures that help the control of chronic disease, such as healthy eating and exercise. The absence of symptoms and the lack of knowledge about the disease for patients with high blood pressure are factors that contribute to the lack of adherence to treatment and worsening pathology. Therefore, it is necessary to use the health education as an instrument for the prevention and promotion of health of these individuals (Figueiredo *et al.*, 2015). Health education, has still been held by the traditional method of vertical, with focus on knowledge transfer, based on the transfer of information, where the nurse is the transmitter of scientific knowledge and the users are the recipients of information, taking into account the prior knowledge that each person has (Figueiredo *et al.*, 2015). However, some authors state that there is an education problem, where there is the idea of equality between individuals, that is, all have previous knowledge acquired throughout their lives in front of a learning situation or Exchange. Thus, it is important the participation of the individual in the process of educating caring, being this, active member in the construction of knowledge, which will provide a dialogical relationship between the nurse and the person assisting in the mutual learning (Ritter *et al.*, 2014). The participation of groups allows the appreciation of knowledge, identifying needs and expectations to build collectively the knowledge. Thus, the work with groups can be considered an assistive technology

used to facilitate the process of health education (Ritter *et al.*, 2014). In the context of health education, and sensitive listener emphasizes how the practice of listening carefully to the narratives of people, which contributes to the targeting and development of educational technologies, assists in the weaknesses found in the lines of the participants (Salci *et al.*, 2013). To develop an educational technology is necessary to evaluate the intended audience by integrating do, think and be, in the sense of knowing the reality and achieve a considerable learning, encouraging empowerment in your self-care (Áfio *et al.*, 2014). With regard to people with high blood pressure, it is important to know your knowledge about health, disease and hypertension making accessible and language-specific educational technology proposal. The systemic Arterial hypertension presents several factors of social, cultural and economic order who work for your development, maintenance and modification of behavior patterns on health. However, it is worth noting, is that the adoption of healthy lifestyles and behaviors evidenced reduce the risk of cardiovascular disease. In this way, health promotion involving educational technologies, provide the knowledge of the risk factors on the pathology, stimulating behavior change and adoption of healthy habits. Thus, the knowledge of the negative consequences for the health of a particular behavior or lifestyle is a necessary condition, giving the opportunity for the individual to prevent and if raising awareness (Campelo, 2018). The construction of educational technology collaborated to emphasize the importance of listening sensitive in health education. This sensitivity in listening allows the active participation of the individual, breaking with traditional educational practices and redirecting your behavior with the intention of transforming the reality experienced enabling improved quality of life (Figueiredo *et al.*, 2015).

Conclusion

It is concluded that sensitive listening is the best way to break the traditional model of education in health, because it replaces the model repository of knowledge for promotion of moments of knowledge exchange between audience and generating health educator's significant results for the production of educational technologies, stimulating and transforming of Humanized attitudes that arouse people's interest for your health care and treatment of their illnesses. It is hoped that this research is a stimulus for the educational activity in health in daily life of nurses, on the possibility of listening to the real needs of the health service user to a health education. It is suggested also the emergence of new educational research sensitive listening in other fields of practice of nurses with the production of technologies applicable in different aspects, processing on inducing health and disease control.

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