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NOTE PREVIEW ARTICLE

INFORMAL CAREGIVER FOR ELDERLY: EDUCATIONAL TECHNOLOGY FOR THE PROVIDED QUALITY OF CARE AND SELF-CARE

CUIDADOR INFORMAL DE IDOSOS: TECNOLOGIA EDUCACIONAL PARA A QUALIDADE DO AUTO-CUIDADO E DO CUIDADO PRESTADO

CUIDADOR INFORMAL PARA PERSONAS MAYORES: TECNOLOGÍA EDUCATIVA PARA LA CALIDAD DE LA ATENCIÓN Y CUIDADO PERSONAL PROPORCIONADO

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ABSTRACT

Objective: implementing an Educational Technology in the form of Workshop for Family Caregivers for older adults as a strategy to promoting physical and mental health for the caregiver and improvement of care for the elderly. **Method:** the method of this research study is methodological, with quantitative and qualitative approach, being developed at the Center for Studies and Research on Aging/CEPE/RJ. The data collection instruments will be a semi-structured interview form, the Zarit Overload Scale and Quality-of-Life SF36. For qualitative analysis will be applied the Technique of Analysis Content; for quantitative data, descriptive analysis, and the normality test Shapiro-Wilks and multiple linear regression. The research project was approved by the Research Ethics Committee, CAAE 19784013.3.0000.5243. **Expected results:** decreased burden of the family caregiver as well as improved self-care and care provided to the elderly. **Descriptors:** Elderly people; Educational Technology; Caregivers.

RESUMO

Objetivo: implementar uma Tecnologia Educacional em forma de Oficina para Cuidadores familiares de idosos como estratégia para promover a saúde física e mental do cuidador e melhora do cuidado prestado ao idoso. **Método:** a modalidade da pesquisa neste estudo será a metodológica, com abordagem quanti-qualitativa, a ser desenvolvida no Centro de Estudos e Pesquisas do Envelhecimento/CEPE/RJ. Os instrumentos de coleta de dados serão um roteiro de entrevista semiestruturado, a Escala de Sobrecarga Zarit e de Qualidade de Vida SF36. Para a análise qualitativa será empregada a Técnica de Análise de Conteúdo; para os dados quantitativos, será empregada análise descritiva, bem como teste de normalidade Shapiro-Wilks e regressão linear múltipla. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, CAAE 19784013.3.0000.5243. **Resultados esperados:** diminuição da sobrecarga do cuidador familiar assim como a melhora do seu autocuidado e do cuidado prestado ao idoso. **Descritores:** Idoso; Tecnologia Educacional; Cuidadores.

RESUMEN

Objetivo: aplicar una Tecnología Educativa en forma de taller para cuidadores familiares de adultos mayores como una estrategia para promover la salud física y mental del cuidador y la mejora de la atención a las personas mayores. **Método:** el método de este estudio de investigación será el metodológico, con enfoque cuantitativo y cualitativo, que se desarrolló en el Centro de Estudios e Investigación sobre el Envejecimiento/CEPE/RJ. Los instrumentos para la recolección de datos serán una hoja de ruta para la entrevista semi-estructurada, la Escala de Zarit de sobrecarga y la calidad de vida SF36. Para el análisis cualitativo será empleada la Técnica del Análisis de contenido; para los datos cuantitativos el análisis descriptivo, así como la prueba de normalidad Shapiro-Wilks y regresión lineal múltiple. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, CAAE 19784013.3.0000.5243. **Resultados esperados:** la disminución del sobrecarga del cuidador familiar, así como la mejora del autocuidado y la atención prestada a los ancianos. **Descritores:** Adultos Mayores; Tecnología Educativa; Cuidadores.

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INTRODUCTION

The current aging of the population is going on very fast proportions in the last years as a result of the reduction in fertility rates and increased life expectancy resulting from technological advances and changes in daily life of the population as changes in family structure.¹

The elderly have multiple diseases, chronic diseases, which require frequent searching for specialists that provide very high direct and indirect costs. What drives the structuring of policies and strategies aimed the prevention and the health promotion for the elderly and caregivers.²

The physiological and biological changes in the elderly require participation and support of family caregivers. By physical proximity and emotional bonds, emotional family system is deeply shaken, shall impose hardships and changes in lifestyle to including the new needs of their ill member, it is common the family undertaking to readjust their roles to facilitate coping with the specific situation at home. Usually, care for the elderly involves a series of tasks that can often lead the caregiver to exhaustion and decreased mental status what makes impossible the elderly care.³

The physical and psychological burdens to what caregivers for the elderly are often exposed, lead to poor quality of life of these individuals. Social problems, worsening of physical health and depression - are the most common consequences of the impact of caring for the elderly mainly on family caregivers. Carers of older people experience a higher prevalence of psychosomatic and psychiatric problems, chronic diseases, increased consumption of psychotropic drugs, social isolation, personal and family stress, changes in family dynamics and social life.⁴

The model of self-care Nola Pender and his metaparadigmas show up as a proposal to correlate behavioral science to nursing work, considering the subject of holistic manner and aware that it will be the protagonist acceptance of care and behavior change.⁵

It becomes necessary a greater biopsychosocial and professional approach to caregivers of elderly patients.⁶ Clarification to healthcare professionals on aspects of quality of life of the caregiver, helps directing strategies for improvement and maintenance of quality of life of these individuals; however, it is needed more studies related to this subject, especially in relation to effective therapeutic approaches in the universe of the caregiver/elderly.

The impact suffered by caregivers can also be observed in the use of health services, as caregivers of elderly patients mainly diagnosed with DA, consult 46% more doctors and use more psychotropic medicines - such as antidepressants and antipsychotics - than caregivers of patients who have DA. Caregivers have a worse physical health, damage the immune system, which may persist until four years after the death of the patient.⁷

Due to the impact, caregivers may develop physical and psychological symptoms. The most common physical symptoms are: high blood pressure, digestive disorders, respiratory diseases and the risk of infections. Frequent psychological symptoms are depression, anxiety and insomnia. The poor health of the caregiver, too, is a factor that contributes to the institutionalization of the patient.⁸

Because of all these factors it has been mentioned as guiding questions of this research: What are the needs of family caregivers in relation to self-care and care provided to the elderly that should be addressed in an educational technology?

The hypotheses of this research are:

H₁ - An educational technology that meets the needs of family caregivers of elderly minimizes the overhead and improves the quality of life of these subjects.

H₀ - An educational technology that meets the needs of family caregivers of the elderly that does not minimize the burn and improves the quality of life of these subjects.

OBJECTIVES

- Implementing an Educational Technology shaped Workshop for Family Caregivers of Seniors as a strategy to promoting physical and mental health to the caregiver and its self-care.
- Raising the needs of caregivers regarding their health, self-care and care provision.
- Identifying the objective and subjective impacts on the main caregiver from the burden scale - ZARIT and quality of life - SF36.
- Analyzing the results of educational technology before and after its implementation in respect of the burden and quality of life of family care.

METHOD

The method of this research work will be the methodological, with quantitative and qualitative approach.

The instrument for the production of qualitative data is the semi-structured script.



For qualitative data, a questionnaire will be applied. It is a technique of reasonable cost, presenting the same questions to everyone and may contain questions to meet specific purposes of research. This technique gives high reliability. Can be measured to measure attitudes, opinions, behavior and other issues. As for the application, questionnaires can be applied individually or in groups, by phone or even by mail.⁹ In this research the questionnaire will be self-administered and, when necessary, will count with help from the researcher.

The research methodology is a type of research that systematically uses the available knowledge as well as providing the development and/or improvement of an instrument, device or of a method. This kind of research applies a systematic use of available knowledge in view of developing or improving significantly an existing intervention, focusing on evaluation and improvement of tools and methodological strategies.^{13;14}

Qualitative research responds to very specific issues, because it occupies in the Social Sciences, with a level of reality that cannot or should not be quantified, working with a universe of meanings, motives, aspirations, beliefs, values and attitudes. This set of human phenomena is understood here as part of social reality, because the human being is distinguished not only for acting, but think about what you do and interpret their actions in and from the lived reality and sharing with their fellow.^{10,11}

Quantitative and qualitative studies offer different perspectives, but not necessarily opposite poles. In fact, elements of both approaches can be used together in mixed studies to provide more information than could be obtained using one method in isolation.¹²⁻⁴

As a field of research will be used the dependencies of the Center for Studies and Research of Aging (CEPE-RJ) that is linked to the Institute Vital Brazil/Health Secretariat of Rio de Janeiro and has as one of its objectives the training. To meet the demands of primary health care, as the care and bedridden elderly relatives, CEPE held twice a month workshop with senior caregiver workload 8am in order to raise awareness and teach fundamental concepts for the care of elder to a lay audience of low-income.

Survey participants will be family caregivers of elderly patients and caregivers participated in the workshop for the CEPE/RJ. The number of subjects chosen in this research was based on the quantity of

caregivers who participated in the workshop for caregivers of patients within 2 years, the total number of participants equal to 800, with these formal and informal caregivers. A search of informal caregivers in the database of the workshops already conducted studies at the Center for Aging Research and capitation for these caregivers complying with the inclusion criteria will be performed. After identification of these caregivers will be held contact for invitation to participate in the study.

This project comprises one part of the research project entitled "Caregivers of Seniors: needs and health impacts" with the approval number of the CEP 19784013.3.0000.5243. The invitation will be made to caregivers, from the moment of joining the study and signing the consent form and starting the search.

The study will consist of five steps:

1st. establishing contact with caregivers to invite them to participate in the study;

2nd. will be applied a semi-structured questionnaire with application of semi-structured interview and the scale of burn Zarit¹⁵ (Annex 1), SF36 16 (Annex 2).

3rd. material analysis, sociodemographic profile, scales and semi-structured interview for the Preparation of Educational Technology in the form of needs-based caregivers workshop.

4th. Implementation of educational technology in the form of workshop in four weeks for caregivers of the elderly based on the needs expressed by caregivers participating in the research, collected through semi-structured interview using the following question: "What do you need in relation to their self-care and to elderly care? The workshop will be held in four weeks with the same group of family caregivers. Workshops will be held for 6 months, totaling 6 groups for this research.

5th. after the four-week workshop will be held scales again: Zarit and SF36 with the objective of comparing the points of pre-workshop and post-workshop.

Will be held content analysis proposed by Bardin. Content analysis consists of three major steps:

1) Pre-analysis, which is the phase of organization that can use various procedures such as superficial reading, assumptions, goals and elaboration of indicators that underlie interpretation.

2) Exploration of the material where the data is encoded from the reporting units.



3) Treatment of results and interpretation, consists of classifying the elements according to their similarities and differentiation, with subsequent reunification on the basis of common characteristics.

The data collected with the Zarit scales and SF-36 are organized in electronic databases in Microsoft Excel 2007 spreadsheet, tabulated, presented in tables or figures with their respective percentage distributions, and inferential from the SPSS software version 13.0.

The analysis will consist of descriptive data analysis and normality Shapiro-Wilks test for the variables as needed. The stepwise multiple linear regression of the dependent variable with respect to independent will be made when possible to then identify which variables best explain the impact of the needs of caregivers of the elderly in their health. The interview will be submitted to ALCESTE software to lexical analysis and the data resulting from the software will be subjected to content analysis proposed by Bardin. For thus be categorized and analyzed according to the theoretical framework that underpins the research.

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EXPECTED RESULTS

This study is expected to verifying the needs of caregivers in self-care and care provided to the elderly, identifying the burn on the caregiver and assessing the quality of life of the same; also, that educational technology workshop-shaped decrease burn and improve the quality of life of family caregivers and care to the elderly. In this way, bringing this information to society can enhance the educational process to the caregiver for the elderly.

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