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EDUCATIONAL GAME ON PREVENTING FALLS IN THE ELDERLY: PREVIEW

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ABSTRACT

Objective: to analyze the educational potential of the participatory creation of a game for the prevention of falls in the elderly that works as a support for the practices of Health Education and Permanent Education in Health.

***Method*:** a qualitative study, participatory action research, which will be developed in a *Unidade Básica de Saúde* (Basic Health Unit) with professionals from the *Estratégia Saúde da Família* (Family Health Strategy) and Núcleo *Ampliado de Saúde da Família* (Extended Family Health Center) teams, besides elderly residents in the area covered by that unit, who are participants in a coexistence group. Data will be collected using the Participant Observation technique, Document Analysis, individual interviews, Photovoice, Focus Groups and a workshop using the Design Thinking technique with support from Anchored Writing to build the educational game. Data analysis will be processed using the IRaMuTeQ® software. This research will be guided by the theoretical-analytical framework of Freirean Praxis. ***Expected results*:** we expect to contribute to advances in the care and educational reality of health professionals in Primary Health Care in the context of the prevention of falls in the elderly, allowing the unveiling of the thematic reality and cooperating with educational practices in this context.

Descriptors: Accidental Falls; Accident Prevention; Education, Continuing; Health Education; Aged; Educational Technology.

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INTRODUCTION

Falls are among the most common and dangerous problems faced by the elderly population, as they lead to a decline in functional capacity, interfering with autonomy and independence, and negatively impact the quality of life of the elderly. Besides impairment of functionality, falls are associated with high rates of morbidity, mortality and early institutionalization in the elderly.[1-3] In general, falls result from the interaction of multiple risk factors, many of which can be adjusted, and therefore, it is crucial that health professionals and the elderly know and understand these factors, as this knowledge depends on the prevention and lessening of falls.[1-2,4]

Considering the above, prevention to minimize problems secondary to falls is necessary and are relevant to *Atenção Primária à Saúde* (APS) (Primary Health Care)[5], consistent with the assumptions of Health Education, highlighting the importance of health professionals plan and carry out educational actions that enable the elderly to qualify the knowledge, attitudes and practices that permeate the prevention of falls in this population.[6]

Paradoxically, investments in the prevention of falls in the elderly are still incipient.[4] There is a large number of elderly people who are unaware of the risk factors for the occurrence of falls[7] added to a limited technical and scientific knowledge of the elderly's health [4,8-9], especially in the context of falls prevention, which causes opportunities for the development of *Educação Permanente em Saúde* (EPS) (Permanent Health Education practices) .[10,11]

It is noteworthy that the Health Education actions performed in this theme are deficient to reduce falls in the elderly and show unpreparedness[7], possibly due to the inadequate professional training in care for the elderly[9], aggravated by the lack of encouragement to carry out educational activities in APS within the scope of EPS.[9,12-14] Besides this scenario, there are no educational policies and strategies that guide the actions to be developed by professionals in this context.[4]

It is believed in the potential of building an educational game about the prevention of falls in the elderly that works as a support for the Health Education practices with a view to the specificities of the aging process, while privileging the EPS process. It is discussed that it is a gerontechnology[15], anchored in playfulness as a pedagogical option for the elderly[16] and an EPS strategy.[17]

OBJECTIVE

To analyze the educational potential of the participatory construction of a game about the prevention of falls in the elderly that serves as support for the practices of Health Education and Permanent Education in Health.

METHOD

Qualitative study, action research on the creation of an educational game about prevention of falls in the elderly.[18] This study will be part of the doctoral thesis entitled “Participatory construction of an educational game on the prevention of falls in the elderly”, of the Graduate Program in Nursing from the Universidade Estadual de Maringá.

It will be carried out in the city of Maringá, located in the State of Paraná-Brazil, in a *Unidade Básica de Saúde* (UBS) Basic Health Unit. The research participants will be the health professionals working in APS linked to the referred UBS: members of a *Estratégia Saúde da Família* (ESF) (Family Health Strategy) and Núcleo Ampliado de Saúde da Família (NASF) (Extended Family Health Nucleus) team; also elderly residents in the area covered by the UBS, who are users of the service and attended by a social group belonging to it.

As it is an action research, the methodological path will be systematized according to the interconnected phases that make up the method, namely: 1) Exploratory Phase; 2) Research Phase; 3) Action Phase and; 4) Evaluation Phase.[18]

This way, the research will have the Exploratory Phase started, in which the identification of the social actors, the diagnosis of the situation, the survey of the problem and the action capacities will take place, through the immersion of the researcher with the chosen community, using the technique of Participant Observation.[19-20] Moreover, Documentary Analysis[21] will be carried out of the management documents belonging to the referred UBS to bring the researcher closer to the community and to understand the political, social, health and environmental characteristics in which the study participants are inserted .

After, the Research Phase will proceed, in which contact with the study participants will occur, through a scheduled meeting. They will be informed about the research, its objectives, course and duration, being invited to join the study. Then, it is aimed to know the universe of the participants and unveil the knowledge and health practices developed by them in the context of the prevention of falls in the elderly. Data will be collected using the techniques of Individual Interview[22] and Photovoice.[23]

Afterwards, the Action Phase will begin, through workshops for the construction of the educational game, in which the study participants will be encouraged to jointly develop the educational game about preventing falls in the elderly. For the construction of the educational game, the De-

sign Thinking[24] approach will be used, and to systematize the solutions, the Anchored Writing technique will be used.[19,25]

After the construction of the game is finished, it will be implemented and used in its reality, and then it will be assessed by all study participants, starting the Evaluation Phase. At that moment, using the Focal Group technique[26], health professionals will point their difficulties and successes in the implementation of the game as a possible strategy for Health Education and EPS, and the elderly will also report their perception when creating and playing, if it empowered the transformation of knowledge and practices in the context of falls prevention.

For data analysis, those referring to the sociodemographic characterization of the research subjects will be analyzed by the technique of descriptive statistics. To assist in organizing the other data, they will be recorded in audio, transcribed in full and processed using the IRaMuTeQ® software.[27]

This research will be guided by the analytical framework of Freirean Praxis.[28] It was approved by ethics committee no. 3,593,037/2019, and will follow all the guidelines established in Resolutions no. 466/2012 and no. 510/2016, both of the National Council of Health and Complementary .[29-30]

EXPECTED RESULTS

It is expected to contribute to advances in the care and educational reality of health professionals in Primary Health Care in the context of the prevention of falls in the elderly, allowing the unveiling of the thematic reality and cooperating with educational practices in this context, mediated by educational technology.

Its results will fill the gaps in scientific publications and studies in this area that currently exist, whose evidence is found in the scarcity of publications that involve this context, highlighting the lack of educational technologies on preventing falls in the elderly and reinforcing the originality of this research.

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