Health education as a strategy for the promotion of the health of the elderly: an integrative review

Abstract

Objective: To identify the key issues and health education strategies for the health promotion for the elderly. Method: An integrative literature review was conducted during the months of March and April 2018, by means of the Virtual Health Library, in the Medical Literature Analysis and Retrieval System Online, Latin American Literature in Health Sciences and the Scientific Electronic Library Online databases. After the search process and the selection of publications, the final sample consisted of 24 articles. Result: A total of 16 Brazilian articles, the majority of which were carried out in the southeast and south of the country, were identified, in which the most frequently expressed themes for the health education of the elderly were healthy eating and physical exercise practices. Conclusion: The actions of education in health were focused on healthy eating and physical activity, carried out by means of group workshops, seminars and/or lectures, performed, in the majority, by nurses and community health agents who were part of family health teams.

Keywords: Health Promotion. Health Education. Health of the Elderly.
INTRODUCTION

Health education is understood as an educational process of knowledge construction, aimed at the appropriation of the theme by the population. It refers to a set of practices that contribute to the increase of the individual and collective autonomy of people and the debate with health professionals and managers in order to achieve health care based on the needs of individuals and communities, improving the quality of life and health of the population.

As an emancipatory pedagogical process, health education favors the development of intellectual autonomy, becoming an imperative tool to promote the improvement of the quality of life and health of the elderly.

Primary Health Care (PHC), of which the main care scenario is the Family Health Strategy (FHS), is a privileged locus of educational practices in health, and as the integrated work of the team of health professionals, favors and mobilizes efforts to contribute to the maintenance of individual and collective health, which can favor critical and transformative awareness, allowing the exercise of citizenship and effecting personal and social changes.

Therefore, primary care health professionals have the important role of promoting health education programs and activities, aimed at the quality of life of individuals and families, and these actions should be integrated into care. To achieve this, such actions should be planned and directed at the appropriate target population, articulated by a multiprofessional team and executed on a permanent basis, considering what the subjects need and want to know to promote their health.

The theme in question is highlighted in the research priorities agenda of the Ministry of Health medical opinion report for the year 2018, since it encourages the evaluation of the implementation of health education strategies in the Unified Health System (or SUS); the surveying of innovative, participatory and resolutive methodologies of health education with the elderly; and the assessment of the impact of health education practices with elderly persons in primary care.

The importance of the theme is therefore clear, both in terms of the performance of care practices and in a research setting; while it is believed that promoting health education actions with the elderly, with their participation and that of their families and the community, is an effective method for promoting the health and quality of life of this population. Thus, it is necessary to broaden knowledge about this theme.

From this perspective, the present study aimed to identify the main themes and strategies of health education for the promotion of the health of the elderly.

METHOD

An integrative literature review was performed. To construct the study, six fundamental steps were followed: identification of the theme and selection of the research question; establishment of inclusion and exclusion criteria for studies; categorization of studies; evaluation of studies; interpretation of results and synthesis of knowledge.

To conduct the research, the following guiding question was elaborated: What are the main strategies used and the themes approached in health education actions, with a view to health promotion aimed at the elderly population?

From the guiding question, in order to facilitate the definition of the descriptors, we used the PVO strategy (Population, Variable of interest and Outcome), which defined the study population as “the elderly”, the variable of interest as “health education” and the outcome as “health promotion”.

The searches were performed between March and April 2018 by two independent evaluators, through the Virtual Health Library, in the Medical Literature Analyzes and Retrieval System Online (MEDLINE), Latin American and Caribbean Saúde (LILACS) and the Scientific Electronic Library Online (SciELO) databases. These choices were justified by their scientific scope in relation to research in the field of health promotion.

For the searches, the following controlled descriptors were selected: “Health of the Elderly”,

...
“Health Education” and “Health Promotion”, which were crossed with the help of the Boolean operator AND, using the advanced search method from categorization by title, abstract and subject.

The following inclusion criteria were chosen: studies whose theme was related to health education with the elderly in article format and available for download, in English, Portuguese and Spanish, with a year of publication between 2013 and 2017. This time frame was chosen because Decree No. 8.114, which deals with the National Commitment to Active Aging11, which includes health education actions, was published in 2013. The following exclusion criteria were selected: studies in the form of dissertations, theses, reflection and literature review articles, documentaries, essays and/or reviews.

The database search revealed 35,211 studies, of which, 2,439 articles were found in LILACS, 32,157 in MEDLINE and 615 in SciELO.

Following the application of the filters, the next step was to select the papers from the reading of titles and abstracts, from which those that did not explicitly fit the scope of this research were excluded. A total of 64 potentially eligible articles were identified were then read in full. At this stage, three repeated articles were excluded, as well as 12 articles which were not suitable for the theme; three literature reviews; three reflection articles and 19 articles that were not available for download, resulting in a total of 24 studies included in the final sample.

The evaluation stage of the studies allowed us to identify that according to the evidence pyramid12 two studies were classified as being of the second level, or clinical trials; one was third level, which was a cohort study; one was the fourth level, a case-control study; five were level five, characterized as quasi-experimental studies, and 15 had a scientific evidence level of six, which represent descriptive studies.

For data extraction, a form was developed containing bibliometric data about the articles studied, summarized in Chart 1, as well as information regarding the pedagogical strategies used, the professionals involved and the results obtained in health education, which are presented descriptively in the following sections.

**RESULTS**

Considering the variables selected for the presentation of the articles, Chart 1 summarizes the following studied aspects: authors, year, place, type of study, sample and study objectives.

| Authors            | Year and Location | Type of Study and Sample | Objectives of Study                                                                 |
|--------------------|-------------------|--------------------------|-------------------------------------------------------------------------------------|
| Mendonça et al.13  | 2013, Viçosa, Minas Gerais, Brazil | Experience report/ 20 elderly persons | Report a working experience with the elderly and support a critical-theoretical reflection on the practice of educational workshops as a health education strategy, in the light of Freire’s thinking, based on the use of participatory methodologies. |
| Nogueira et al.14  | 2013, Goiânia, Goias, Brazil     | Qualitative research/23 elderly persons and six community health agents          | To identify therapeutic factors present in the health promotion group of elderly persons. |
| Evers et al.15     | 2013, Australia     | Cohort/710 elderly persons         | Conduct a multifaceted assessment of a social marketing campaign to raise asthma awareness among elderly persons in a regional Australian community. |
| Bhurosy and Jeewon16| 2013, Mauritius, East Africa      | Experimental model/80 people aged 40 or over                                  | To evaluate the effectiveness of a theory-based educational intervention to improve calcium intake, self-efficacy, and knowledge of older Mauritians. |

*to be continued*
### Chart 1

| Authors            | Year and Location          | Type of Study and Sample | Objectives of Study                                                                                                                                 |
|--------------------|-----------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Chung and Chung¹⁷  | 2014, Hong Kong             | Experimental study/60 elderly persons | Evaluate a three-week program that includes culinary demonstrations with free food samples to motivate older adults to cook more and improve their nutritional status. |
| Ferreti et al.¹⁸   | 2014, Chapecó, Santa Catarina, Brazil | Qualitative research/ seven elderly persons | To verify the impact of a health education program on the knowledge of elderly persons about cardiovascular diseases.                                     |
| Janini et al.¹⁹    | 2015, Rio de Janeiro, Brazil | Qualitative research/83 elderly persons | To analyze the impact of health promotion and education actions in the search for quality of life, autonomy and self-care of the elderly.            |
| Sink et al.²⁰      | 2015, USA                   | Randomized clinical study/ 1,635 participants | Determine whether a 24-month physical activity program results in better cognitive function, lower risk of mild cognitive impairment (MCI) or dementia, or both, compared to a health education program. |
| Machado et al.²¹   | 2015, Minas Gerais, Brazil  | Convergence research/21 elderly persons and nine health professionals | Describe the stages of the empowerment process of an elderly group in a rural community.                                                                  |
| Almeida et al.²²   | 2015, Víçosa, Minas Gerais, Brazil | Intervention study/82 participants | Analyze possible changes that have occurred in anthropometric measurements and levels of functional physical fitness of elderly persons participating in a community intervention project. |
| Caprara, et al.²³  | 2015, Madrid, Spain         | Quantitative study/73 participants | Testify to the effectiveness of Vital Aging-Multimedia, a psychoeducational multimedia program designed to promote successful aging.                  |
| Sousa and Oliveira²⁴ | 2015, Braga, Portugal       | Intervention study/25 elderly persons | Contribute to the active aging of day/social centers for elderly persons, harmoniously developing all its dimensions, aiming to make users autonomous, participatory and active. |
| Cecílio and Oliveira²⁵ | 2015, Limeira, Sao Paulo, Brazil | Intervention study/23 elderly persons | Promote, through Nutrition Education activities, healthy eating habits in a group of institutionalized elderly persons.                                      |
| Luten et al.²⁶     | 2015, Groningen, Holland    | Quasi-experimental study/ 564 elderly persons | To assess the range and effects of short and medium term intervention (with local media campaign and environmental approaches) on physical activity and healthy eating in elderly persons in a socioeconomically disadvantaged community compared with a control group. |
| Lucena et al.²⁷    | 2016, João Pessoa, Paraiba, Brazil | Experience report/99 elderly persons | Describe a report of health education practices of a university extension project, encouraging the adoption of preventive measures of self-care in relation to the health of the elderly. |
| Munhoz et al.²⁸    | 2016, Santa Maria, Rio Grande do Sul, Brazil | Experience report/144 elderly persons | Report the experience of members of the Nursing Tutorial Education Program in the “Acampavida” extension project, held annually with elderly persons, through health education activities. |

*to be continued*
The themes addressed in the health education actions were varied, however, there was a predominance of discussions about healthy eating and the practice of physical exercises. The other themes included chronic diseases with emphasis on arterial hypertension, diabetes mellitus, respiratory disease, sexuality, active aging, healthy habits, medication, legal and financial questions, and social participation.

These actions were developed by health professionals, mostly primary care workers; with the participation of community health agents, nurses, nursing technicians, doctors and dental surgeons. Only one article did not specify the professional category.

In many studies, the actions were performed by students and teachers from various undergraduate courses, especially Nursing, followed by...
other courses, which appeared less frequently, such as: Medicine\textsuperscript{27,30}, Physical Education\textsuperscript{22,32}, Nutrition\textsuperscript{22,29}, Pharmacy\textsuperscript{36}, Occupational Therapy\textsuperscript{29} and Physiotherapy\textsuperscript{32}.

In terms of the strategies adopted for the application of health education activities, nine studies used group workshops\textsuperscript{13,20-22,27,29,32,34}; five used seminars and/or lectures\textsuperscript{17,19,30,33,36}; three made use of expository, dynamic and informal conversations\textsuperscript{18,25,30}; two applied dialogued exposition\textsuperscript{16,24}; marketing campaigns\textsuperscript{15,26} and digital education\textsuperscript{23}. Three studies did not mention the strategies adopted\textsuperscript{14,31,35}.

As a theoretical framework for conducting the studies, two\textsuperscript{13,27} were based on the work of Paulo Freire. Many articles, although not mentioning the subject directly, spoke about health education with a participatory and dialogical approach, aiming at the empowerment of the subject, which is consistent with Freirean thinking\textsuperscript{8,22,25,28,30,35}. The other references were the National Health Promotion Policy\textsuperscript{19}, a belief in health model\textsuperscript{16}, Kurt Lewin’s group dynamics\textsuperscript{21}, the hermeneutic interpretative paradigm\textsuperscript{24} and the integrated model of change\textsuperscript{26}, while ten studies did not mention the use of referentials\textsuperscript{15,17,20,23,29,31,34,36}.

The actions developed were evaluated positively by both the elderly persons and those who performed the actions in all the studies analyzed. Even those that presented strategies with multimedia or marketing campaigns only, produced more modest impact evaluative results, but still described some benefit in the health promotion of the elderly persons.

**DISCUSSION**

The data demonstrated the versatility that health education actions present to health professionals as a strategy to promote the health of the elderly population, both in relation to the themes addressed and the strategies used.

The findings highlight the value of health education for this specific population, especially when the exchange of scientific and popular knowledge occurs; with the valorization of mutual knowledge, giving importance to the dialogue and increasing the power of comprehension of the elderly themselves, of others and the world, expanding the comprehension of diverse realities.

Health education for elderly persons is a topic of worldwide interest, since the current demographic and epidemiological changes highlight the need to value actions for this population, focusing on the development of autonomy, independence and improving quality of life through active and healthy aging.

The interest in producing studies on active aging in recent years is explained by the scenario of demographic transition, with an increasing proportion of elderly persons in the global and Brazilian population.

In Brazil, the recognition of this theme as a research priority was stated by the Ministry of Health\textsuperscript{4}, boosting scientific production in the area, in view of the need to identify and discuss the issues that relate to the new demands of society, as well as seek strategies that stimulate autonomy and improve the quality of life of the geriatric public.

In terms of the themes of educational actions with the elderly public, there was a predominance of topics such as healthy eating and physical activity, corroborated by a study that showed that health promotion was essential at all ages, and that for elderly persons its value is unquestionable, and furthermore that it is essential that elderly people create healthy lifestyle habits, particularly as regards their diet and exercise\textsuperscript{24}.

Chronic diseases such as hypertension and diabetes were also frequent themes, which may be explained by the higher prevalence of such diseases with advancing age\textsuperscript{16}, and which therefore require special attention.

In a Brazilian study\textsuperscript{35}, the choice of topics to be addressed with groups of elderly persons was decided mainly by the needs observed by health professionals, with the most addressed subjects being physical activity (90%), diet (85%) and lifestyle (75%).

This highlights the need to transform the traditional manner of conducting health education groups\textsuperscript{35}. It is necessary to go beyond recurrent
biomedical topics such as illness, medications, complications and treatments, so that other topics such as leisure, the exchange of popular experiences and healthy community cooking can be addressed; among the many other possibilities to be applied in a health education group with elderly persons.

Some of the studies\textsuperscript{13,14,18,19,22,24,28-30,35} highlighted the importance of valuing the participation of the elderly persons in the actions, in order to seek out the topics of interest, as well as focusing on their previous experiences. When the elderly interact and the educational activity is based on their needs, it becomes more productive and provides more effective responses.

Health promotion presents us with challenges for the health education process, such as more dialogical and reflexive initiatives based on the practical experience of the actors\textsuperscript{37}. The problematizing education defended by Paulo Freire is inserted as a reference for educational approaches through participatory strategies.

Some authors\textsuperscript{13,35,38} believe that participatory strategies and ludic approaches can contribute to healthy and active aging, as they are real spaces for the individual and collective expression of experiences and exchange of knowledge; as Paulo Freire argues, they become liberating and emancipating educational practices, as they focus on the experiences of the subjects, enabling free expression and addressing subjects of interest without disregarding prior knowledge, leading to the exchange of scientific and popular knowledge, rather than the vertical non-dialectical transmission of information.

Trying to break with the traditional aspect of educational workshops and allow one such program to be organized by its elderly participants was reported in a study, with resultant creativity, interest and commitment among the members, who unanimously elected this workshop as the best of those offered\textsuperscript{39}.

Literature\textsuperscript{21,39} points to the formation of groups and workshops with elderly persons as good strategies for establishing a process of coexistence among those involved, as well as the empowerment of their health, the participation of members, the practical implementation of the learning acquired, and the exchange of experiences and knowledge among the service users and health professionals.-

Of SUS professionals, the family health team nurse is especially responsible for educational actions, regulated by health promotion guidelines\textsuperscript{40}; but it is also believed that it is the responsibility of the entire health team to work in an integral manner, focused on prevention and health promotion.

Such professionals are not, however, familiar with medical practices in prevention and health promotion, and thus is not best disposed to work with health education actions\textsuperscript{40,41}.

This shortcoming emphasizes the importance of Permanent Health Education (PHE) for professionals working in primary care, already evidenced in 2017 by PRO EPS-SUS, established through Ordinance GM/MS No. 3,194, which considered the need to resume funding for and plan PHE actions at state and local levels\textsuperscript{42}.

This ordinance aimed at financial transfers of funds to municipal districts for PHE actions in their territory aimed to stimulate, monitor and strengthen the professional qualifications of health workers, in order to transform health practices, towards the fulfillment of the fundamental principles of SUS, based on local realities and the collective analysis of work processes.

Thus, the government has realized that valuing the continuing education of health professionals can have returns in the context of improving the health situation of the population. This can be facilitated by the insertion of universities in health education actions in Basic Health Units (BHU), as well as in other places where the elderly are present, such as long-term care institutions.

The Ministry of Health and the Ministry of Education and Culture have been fostering the partnership between professional training institutions and health services, aiming to bring them closer to the SUS and the health needs of the Brazilian population, through programs that integrate higher
education, community-service, as well as initiation schemes in work and research, with the participation of undergraduate students from various courses, teachers from educational institutions and health service professionals.

Planning activities with elderly persons in an interdisciplinary manner is challenging for students, as the actions previously lacked a participatory and dynamic user approach, but by adopting these dialogical strategies, behavioral changes in group members were observed, with reported satisfaction from elderly persons, staff and all those involved in the process. It has been verified that the students/teachers worked as facilitators of new possibilities, bringing another perspective to the needs of the group and the practices adopted for the care of geriatric users at the BHU.

Despite this expansive process of population aging, the articles showed that studying better ways of implementing health education actions for the elderly public that can contribute to and stimulate self-care, autonomy and the improvement of quality of life are still required. Educational interventions are key elements of health care delivery and that, based on the analysis of health policy experts and government agencies, such actions are cost-effective and have great potential to promote the physical and mental well-being of the elderly population.

It is recognized that educational interventions are key elements of health care delivery and that, based on the analysis of health policy experts and government agencies, such actions are cost-effective and have great potential to promote the physical and mental well-being of the elderly population.

It is believed that health promotion and disease prevention strategies, associated with better care practices, can contribute to reducing the proportion of frail elderly persons, improving the health conditions of this group and reducing costs to the system; thus, participatory approaches are possibilities for implementing these preventive measures.

The importance of actions of wellbeing and their impact on health costs in Brazil were mentioned in one study. The analysis was based on the idea that the increase in the number of patients of various age groups, especially the elderly, led to greater demand for health services, with subsequently increased spending. Thus, prevention was considered the best investment. Strategies should therefore be created to delay illness and disability, aiming to increase the level of independence and autonomy of people.

Further studies need to be conducted to assess the impact of activities aimed at the elderly population, as well as to elucidate the need for new health education strategies guided by themes of interest for the elderly and which can contribute to improving their quality of life. Those that evaluate these actions and their impacts on the elderly population, as well as studies with evidence levels one and two, should also be encouraged.

Limitations of this study include: the failure to conduct an analysis of the effectiveness of the educational actions from the perception of the elderly persons, since the discussions presented are based mostly on the perception of professionals about the actions implemented. Furthermore, the scarcity of studies that discuss the effectiveness and efficiency of these actions for the health sector is also a challenge for scientific research.

CONCLUSION

It can be concluded that health education actions aimed at the elderly are based mainly on the promotion of healthy eating and physical exercise, and are carried out mainly by nurses from family health strategy teams and by community health agents, through group workshops and seminars/lectures.

It was also found that actions to promote wellbeing focused on health education aimed at the elderly population were important strategies used by health professionals and/or university students to promote comprehensive care that favors healthy and active aging.

The innovation of the present study is based on the converging of the relevant thematic areas for research and care for the elderly, enabling readers to deepen their knowledge about the main themes and strategies used, as well as identify gaps for the development of new studies.
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