The elderly and implications of their biopsychosocial needs for health care in Latin America

Abstract

Objective: To analyze the experience of caring for the elderly using the biopsychosocial approach, based on the scientific evidence, in order to strengthen health care in Latin America.

Method: An integrative review of original and systemic review articles, published between 2014 and 2019. The search was conducted using MEDLINE (Produced in the National Library of Medicine of the United States), LILACS (Latin American Literature and of the Caribbean in Health Sciences), CUMED (Cuban Medical Literature), and BDENF (Virtual Health Library in Nursing). Search descriptors included: older adult, and needs assessment. Fifteen articles were identified that met the inclusion criteria.

Results: The main health needs of the elderly population correspond to problems related to specific pathologies and health problems. The Psychological and social needs arise from living alone, social isolation, recent functional dependence, low social interaction, depression in old age, management of the physical or social environment, changes in sexual relationships, abuse and neglect.

Conclusions: The needs biopsychosocial can be supported with general health education relevant to older adults; such education needs to focus on the specific needs and life experience of each elderly person

Keywords: elderly person, needs assessment, aging, older adults, sociodemographic changes

Abbreviations: MEDLINE, produced in the national library of medicine of the united states; LILACS, latin american and caribbean literature in health sciences; CUMED, cuban medical literature, CGA-GOLD, comprehensive geriatric assessment

Introduction

The elderly population is growing worldwide. In 2017 there were 962 million people over 60 years old, and according to projections for 2050, it is expected to double to 2100 million. Europe in 2017 registered the highest percentage of the population aged 60 or over (25%) compared to the rest of the world. In that same year in Latin America there were 77 million older adults. According to the data, the pace of aging in developing countries is faster than in developed countries. Therefore, Latin America will have less time to adapt to the pace of aging in developing countries. This integrative review will investigate the following question: What are the biological, psychological and social health needs of older adults, based on our experience of caring for the elderly; and 5) Improvement of measurements, monitoring and understanding, which encourages research on aspects that contribute to the care of the elderly individuals.

Taking into account these areas, and considering that the Latin American population requires dynamic bases of action for demographic transformation, this integrative review will investigate the following questions: What are the biological, psychological and social health needs of older adults, based on our experience of caring for the elderly, so that we can provide adequate health management for this population? Therefore, the objective of this review is to analyze the experience of caring for the elderly under the biopsychosocial approach, based on the scientific evidence.

Methodology

A bibliographic search was carried out in the following databases: MEDLINE (Produced in the National Library of Medicine of the United States), LILACS (Latin American and Caribbean Literature in Health Sciences), CUMED (Cuban Medical Literature), BDENF (Library virtual health in Nursing). The search descriptors used were: Older person, needs assessment, and evaluation of needs DECS/MESH in English, Spanish, Portuguese, from the Virtual Health Library (BIREME). The article selection criteria included 1) systematic reviews and original articles, 2) availability of full text, 3) texts in all the indicated languages and 4) publications between 2014 and 2019.
The search yielded a total of 625 articles from which 61 were selected, classifying them according to: 1) biological needs, 2) psychological needs and 3) social needs. They are presented individually and grouped according to the health needs of similar older adults (Figure 1).

The analysis of the health needs of older adults was organized by taking into account one of the priority areas of action of the WHO’s “Alignment of Health Systems with the Needs of the Elderly”, organizing evidence from biological, psychological and social needs of the elderly. This strategy was used in order to establish guidelines for health care, with actions related to promotion, prevention, cure, treatment, home care and health rehabilitation.

Figure 1 Flowchart of the selection process of the articles included in the review. 2019.

Results

Biological health needs

In the biological field, a large part of research on the elderly focuses on specific pathologies, their management and the adaptation process. At present, this vision represents a reductionist approach since it does not consider perceived biological health needs as determined by older adults, caregivers or health professionals.

In the review of the literature, the approach to the biological needs of the elderly today varies widely. For example, one of the major problems cited is the need for managing urinary incontinence, which can interfere with the activities of daily living in the elderly (ADL).

On the other hand, the application of the Balance of Care (BoC) model as a way to explore the provision of resources and services in the community and in social and health institutions reveals high levels of need for managing dementia and stroke.

The Comprehensive Geriatric Assessment (CGA-GOLD) questionnaire, when used to detect co morbidity based on evidence and quality of life (EORTC-QLQ-C30), reveals multi-faceted approach problems such as hypertension, diabetes, dyspnea on flat surfaces, polypharmacy, difficulty walking, fatigue, urinary incontinence and falls.

Other studies identify the needs of the elderly in terms of satisfaction and dissatisfaction. In the biological domain, dissatisfaction is significantly associated with depression. In addition to the impaired functional state, vision, hearing, sleep and exercise, it is striking that for these needs the risk factors of age, institutionalization and care by family members are elements that contribute to the satisfaction of needs.

Citation: Yánez AC, Apip MPM, Kellogg GL. The elderly and implications of their biopsychosocial needs for health care in Latin America. MOJ Gerontol Ger. 2019;4(6):223–227. DOI: 10.15406/moijg.2019.04.00210
In the nutritional area, a longitudinal survey on aging determined that nutritional status is in urgent need of attention, and it suggests that the application of anthropometric indicators focused on the measurement of calf circumference (CC) shows better results than the calculation of the Body Mass Index (BMI). Likewise, the risk of malnutrition is evident in older adults who have been recently admitted to large health care institutions.

In the field of palliative care, the evaluation of five triggers is suggested: 1) hospital stay greater than or equal to 10 days; 2) multisystem organ failure greater than or equal to three systems; 3) stage IV malignancy; 4) post-cardiac arrest status; and 5) intracerebral hemorrhage that requires mechanical ventilation.

### Psychological and social health needs

Regarding psychological and social needs, studies show that living alone, social isolation, recent functional dependence, and low social interaction are the ones that determine the highest prevalence.

In studies conducted through the application of AgeMooDe, a prospective observational study, "Depression in old age in primary care: needs, use of medical care and costs", argues that more research on medical use and costs for the older person is required.

Studies also suggest that the quality of life, health conditions and life expectancy of the elderly person is related to adverse childhood experiences (ACE); that is to say that the adverse events that occur in the first years of life generate an emotional imbalance affecting the personal resources the older adult can draw on later in life.

Alternatively, an analysis of the environmental management needs of the elderly is considered by some studies to be crucial in improving their quality of life. Analyses of the environments of older adults are integral to the field of environmental gerontology, which emphasizes the need for an interdisciplinary approach to understanding the attributes and functions of the physical-social environment in the aging population, which ultimately contributes to planning gerontological care with a holistic perspective.

Other studies demonstrate the need to approach intimate relationships and sexuality, from the analysis of physical changes that modify the sexual response, to emphasizing the gender differences in intimate situations. For example, age-related in skin and mucous membranes more serious for women because their mucous membranes are less extensible. For men, however, the use of certain medications can impair circulation, particular the vascular line, causing difficulties in erection and ejaculation, often leading to a sense of failure. Neurological and hormonal changes, different perceptions of cold and heat, and alteration of each person’s hourly rhythms suggest the need for a change in sexual activity which focuses more on direct stimulation for both men and women and constituting a cultural conflict for Latin American women.

Some studies suggest that abuse, neglect and mistreatment of the elderly are prevalent, and appropriate measures to prevent them are lacking. These abuses may be physical, sexual, psychological or emotional in nature. Interventions are needed to prevent and address violence for economic or material reasons, abandonment or negligence, and serious loss of dignity among the elderly.

Finally, a study analyzes the need of the elderly person to live in a community that emphasizes important themes such as "family is central" or "church is central", "heritage", "unity", "strength" and "longevity". Conversely, community leaders perceive the "rural economy", "distance to resources" and "seasonal resources" as significant barriers for older adults who need to develop.

### Discussion

Faced with the sociodemographic changes raised, it is necessary to propose actions aimed at responding to the emerging needs of the elderly that involves each component of the system -- people, families and communities -- and thus make available the resources that allow these possible solutions to be implemented.

Based on the WHO’s five priority areas of action which focus on the “alignment of health systems with the needs of the elderly”, it is worth asking 1) to what extent unsatisfied needs related to impaired functional status, vision, hearing, sleep and exercise can be met in a timely and efficient manner and 2) what actions the health team’s should take to satisfy them. Behind these needs lies the quality of life of the elderly person, which according to research, is best addressed through cognitive behavioral interventions the improvement of sleep quality, for example, is one such need.

Although there are numerous studies of interventions in the elderly population group, there are no data on the use and cost of medical care in Latin America. Service providers currently invest in meeting the needs of an economically active population, including workers and their families, and are unprepared for the increasing care demands of an aging population. In Latin American, this phenomenon requires increased attention, and forces us to rethink the organization of services to cover unmet needs and prepare professionals to confront these needs.

Regarding gender-related needs, the available evidence does not show a differentiation of biological or psychosocial needs by gender. However, the bibliography suggests that Latin America women have a longer life expectancy than men, although it does not appear to be related to better life conditions. In Latin American culture, most women assume a traditionally female domestic role, with the associated physical labor, making them more vulnerable to the lack of resources and institutional protection.

On the other hand, there is no evidence of greater interventions with older males. The differences in traditional male and female roles makes it difficult for older men to be included in the educational or social programs that involve mixed groups. This suggests the needs for gender-specific health care practices for the elderly.

As long as the objective of such care is to improve the quality of life of the elderly person, health care personnel will need to be trained in educational psychology in order to achieve care goals.

### Conclusion

The main health needs of the elderly population correspond to problems related to specific pathologies such as urinary incontinence, hypertension, diabetes, dyspnea on flat surfaces; health problems such as polypharmacy, difficulty walking, fatigue, falls, impaired functional status, problems with vision, hearing, sleep, exercise, nutritional aspect; and triggers for palliative care such as hospital stays, multisystemic organ failure, post-cardiac arrest status and intracerebral hemorrhage that requires mechanical ventilation. Psychological and social needs arise from living alone, social isolation, recent functional dependence,
low social interaction, depression in old age, management of the physical or social environment, changes in sexual relationships, abuse and neglect. While many of these needs can be supported with general health education relevant to older adults, such education needs to focus on the specific needs and life experience of each elderly person.

**Acknowledgements**
None.

**Conflict of interests**
Authors declare that there is no conflict of interest

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