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## Review Article

# A Critical Review of Studies on Health Needs Assessment of Elderly in the World

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## ABSTRACT

## Article history

Received 11 Jan 2017 Accepted 2 March 2017 **Introduction:** Health improvement, control of communicable diseases and increase in life expectancy among the elderly of developed and developing countries has greatly increased. Since the health care and social needs of older adults differ from that of other adults, it is necessary to identify the needs of the elderly in order to make proper plans that will promote their health. The aim of this paper is to critically review these researches.

**Methods:** A comprehensive literature review on the needs assessment of elderly health was applied searching English and Persian databases in Pub Med, Science Direct, ProQuest, Elsevier, Magiran, ISC and using key words including, Health need, Assessment, Elderly, Aging, Older adults, Aged and Health care needs.

**Results:** Initial search yielded 745 references, considering the inclusion criteria, 21 papers were reviewed. Results revealed that in conducting needs assessment, various methods and procedures in various health dimensions including physical health, mental health, emotional, care, social, cultural, economic, nutritional, service, security, legal and educational needs have been utilized. Some of the dimensions had been more explored and some rarely.

Conclusion: Most of the conducted studies had mainly focused on the elderly physical health needs and had neglected to take in to account other needs such as social and health care needs. In order to comprehensively recognize the health needs of the elderly, identifying their health care and care services is also important. Furthermore, in addition to quantitative studies, discovering the older adults' perceptions of their own health needs is also necessary. It seems that the challenge ahead of managers, experts and researchers on elderly health is trying to design comprehensive mechanisms of health need assessment and considering it as a reference for any future planning

Keywords: Aged, Needs Assessment, Health, Review Literature as Topic

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#### Introduction

Human's longevity has increased due to advances in health and by controlling communicable diseases. Therefore, the number of elders is increasing in developed and developing countries (1, 2). In almost every country, the ratio of the population over 60 has grown more than any other age group (3). According to world health organization, the world is aging with a

rapid pace in such a way that the ratio of people who are 60 and more in the world will double between 2000\_2050; reaching to about 11 to 22 % (4). According to reports, 80% people over 65 years\_old suffer from at least one disorder or chronic disease (5-7) such as diabetes or cardiovascular diseases among elders, and as a result, these people need more health

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care than other citizens of the society (8-9). Twenty three percent (23 %) of the total global burden of disease is attributable to disorders in people aged 60 years and above (10). Furthermore, reduction of relationships and social interactions, due to reasons such as loss of wife/husband and relatives, poverty, and loneliness are common social issues which make them face a big challenge to maintain a healthy lifestyle (11). Currently, as well as developing appropriate and effective plans and strategies to solve these issues have become a global common concern. World health organization, considered supporting researches and trainings regarding the elderly and social cares as a basic principle in its new strategy for the year 2006\_2015. After the Madrid\_Spain statement, countries were obliged to provide elderly care and services in an extensive manner based on needs assessment of the physical and mental health of the elderly from 65 years old (12).

If we consider need as distance between existing situation and what must be, need may be categorized as "felt need" i.e. a need which is recognized by an individual or a society and "determined need", i.e. need which is determined by experts. Some researchers suggest that both kind of needs should be addressed and preferably should not be very different (13-16).

Need assessment is a systematic study of difference between what exists and what must exist in considered groups and situations (17-19) to guide goals setting, and finally to determine priorities for action. From these perspectives, it can be considered as the first step in designing every program (20, 21). Health needs assessment is analyzing behavioral, environmental and physiological factors for health, even when existing health problems have not yet emerged (22).

Several countries and various researchers have assessed the health needs of the elderly. This paper tries to critically review the health needs of the elderly and also to assess these needs. To this end, it aims to provide a comprehensive description for various frameworks and tools employed in conducted studies, to determine the dimensions and ranges of the elderly health needs and also, identify researchers understanding of elderly health needs as well as its determinant factors.

#### Methods

Related studies, since 1990, were identified by searching English and Persian databases including, Pub Med, Science Direct, ProQuest, Elsevier, Magiran, and SCI, using key words, Health Needs, Needs assessment, Elderly, Ageing, Older adults, Aged and Health care needs. The primary inclusion criteria were (1) the full-text articles published either in English or Persian since 1990, (2) the organizational reports, (3) the studies on needs assessment of elderly (60 years old and more (4) the quantitative, qualitative or mixed method studies.

The process of identifying studies is show in Figure 1.

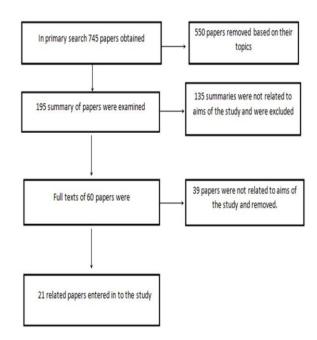


Figure 1. Process of identifying studies

Ethical considerations

This study was approved by the ethics committee of Shahid Beheshti University of Medicine Sciences with number SBMU.REC.1393.682.

#### Results

Among the 745 investigated references, 21 papers met the inclusion criteria. Table 1 shows a summary of the investigated papers.

Only two papers had taken into account the elders' own points of view regarding their health and health care needs (23, 42) as majority of studies assessed health needs from specialist's point of view. With respect to the research method, most of the studies took quantitative approach as only two papers applied qualitative approach (24, 25, 27-30, 32-35, 37, 38, 40), and, two studies used mixed method research approach (23, 42). While most of the studies were cross sectional studies, there were only one cohort studies and two review studies.

Applied tools in these studies were mainly researcher\_made tools and in some studies several tools were used for investigating health needs (36–41). For example, Katz and Lawton tools were utilized in some studies to investigate functional situation in physical health (39-41). In two studies, GDS tools were used for investigating mental health (30, 36). In a mixed method study, a comprehensive, standard tool was designed for assessing health needs in various dimensions for urban Tehran elders (26). Among these studies, only one of them used grounded theory approach and precede\_proceed model (23).

Table 1. Scope of need Writer/year/title	Type of	Goal	Methods	Summary of results
	study		or tools	
Dong XQ, et al (2010). Assessing the Health Needs of Chinese Older Adults: Findings from a Community-Based Participatory Research Study in Chicago's Chinatown. (23).	Qualitative (grounded Theory)	Determining cultural views of healthy elderly persons	Focus Group discussion	participants expressed their perspectives of their needs: Physical function; Psychological well-being; Social support; Cognitive functions; The perceived social support was a major unmet health need. The major negative enabling factors that inhibit participants from fulfilling their needs were: Availability; Affordability; Cultural barriers regarding health care services; Need for planning for health ageing based on health need assessment; Need for social health and health care services, which should be provided with regard to cultural
Abdulraheem IS, (2007). Health needs assessment and determinants of health-seeking behavior among elderly Nigerians (24).	Cross-sectio nal	Determining physical health needs, and determining factors of healthy behaviors among elders	Structured Interview	sensitivities; The most disorders reported included: Body pain, joint pain and fatigue; The most pervasive determinants of health-seeking behavior were socioeconomic indicator and the nature of illness; Need for treatment when they are hospitalized was listed by the
Adznam SN, et al (2009). An Action Research on Promotion of Healthy Ageing and Risk Reduction of Chronic Diseases: A Need Assessment Study Among Rural Elderly MALAYS, Care Givers and Health	Cross-sectio nal	Need-assessment of Malays elders in order to determine nutritional knowledge and educational needs of nurses and employees in health care centers.	Questionnaire	majority as health needs; Nutritional education needs; The need for appropriating a nutritional plan; The need for social interaction in order to promote nutritional education for the elderly; The need for financial support;
Professionals Emami A, et al (2010). Developing a questionnaire for conducting cross- national studies 'Self- reported health and needs among elderly Iranians and Swedes.' (26)	Mixed method	Developing and validating a questionnaire to investigate health care needs of elders in Iran and Sweden	Focus Group discussion, Expert panel	The final questionnaire was developed with 150 items in 10 dimensions of needs.
Mokgele E, Du Rand PP (1999). Health needs assessment of the elderly people of Mangaung (27).	Cross-sectional	Determining needs of physical, mental and social health in elders of Mangaung.	Questionnaire	One of the major social needs of the elderly was lack of protective sources which is mostly provided with by their families.  The need for a multidisciplinary approach to identify elderly needs.
Zunker CH, Rutt C (2007). Ageless health needs assessment on the US Mexico Border: Ciudad Juarez (28).	Population- based survey	Determining the health need of elderly Mexicans living in Ciudad Juarez.	Phone- interview, personal interview	approach to identify elderly needs The main needs of the elderly in this study included: Training needs; Financing need; Mental health services need; Physical activity needs Women's specific needs (more than males);
Rajeshwar D (2008), .Needs Assessment Study Among Urban Elderly A Rapid Assessment. Help Age India (29).	Survey	Assessment of the health care emotional, social and cultural needs of the elderly Semi-structure questionnaire with open ended questions through interview.	Semi-structure questionnaire with open ended questions through interview	Major needs of studied elders were: Lack of financial-independence; Lack of insurance coverage; Help in buying medicine and transportation Facilities. Negligence from their close relatives

Writer/year/title	Type of study	Goal	Methods or tools	Summary of results
Scott R, Corley CH (2012). Assessing The Needs of Elder Floridians (30).	Survey	Determining the living - needs, health care needs, and limitations of self - care of the elderly.	Questionnaire	The most important studied elderly needs included: The need for help (for instrumenta activities of daily living); The need for training; The need for nutrition; The need for suitable physica activity; The need for suitable health insurance;
Manson-Siddle C, et al (2008). Older People Assessing Health and Social Needs in North East Lincolnshire (31).	Mixed method	Investigation of elderly health and social needs, determination of current and future basic needs; determination of elderly perception from their needs, determination of existing problems in health care services. Questionnaire & semi-structure interview	Questionnaire & semi- structure interview	The need to develop well-planned targeted services that supported independent living in later life; Providing the elders with menta health care and services; The need for social interaction; The need for social network;
McMillan M, et al (2013). An Assessment of the Health and Social Care Needs of Older People (32).	Survey	A comprehensive needs assessment of the elderly health and social needs now and in future.	Questionnaire	The main identified needs included: Social services; Health care services specific to the elderly with concentration or chronic disease; Nutrition Needs; Appropriate physical activity; Weight control program for the elderly;
Motlagh et al (1390) Iranian Elders health (33).	Cross-sectional	Investigation of elderly health situation in Iran.	Questionnaire	The most important needs included: The need receiving Comprehensive accessible and cost-effectivenes health care services; The need for happiness;
Malek Afzali H, et al (2008). Social mobilization for health promotion in the elderly (34).	Cross-sectional	Health needs assessment of the elderly.	Questionnaire	Various education needs for healthy lifestyles; The need for specific attention t women's group in policy-making. Economic needs; Emotional support needs for th women's elderly;
Mohaqeqi kamal SH, et al (2011). Need Assessment Among The elder of Social Security Organization & National Retirement Fund (35).	Cross-sectio nal	Determining the health need- assessment of pensioner elders in social welfare organization and state retirement	Checklist related to need assessment and Lipad questionnaire of elder,s life quality	The most important studied elderl needs were financial needs; Health care services wit concentration on chronic disease; Need for social support;
Kanani MA, Hosseini J,(2011). Bang for the elderly and health care needs: there are inconsistent in Iran until 1430needs: Requisites of Iran until 1340 (36).	Cohort study	Determination of health care needs for elders now and in future.		Health care system of Iran was no ready for tackling needs and quic planning for predicting as well a fulfilling these needs, along wit applying methods of prevention an using experiences of other countries
Sadeghipour H, et al (1999). Needs Assessment of Elderly Health, Economic and Social in Tehran metropolitan area (37).	Cross- sectional	Determination of health and economical needs of elders.	Questionnaire	The main identified elderly need included: Health care services; Financial issues; Mental health services; Education needs specific to the elderly care-givers and staff; Need assessment to identify the elderly's specific needs in different area.

Writer/year/title	Type of study	Goal	Methods or tools	Summary of results
Kaldi AR, et al (2005). Assessment of elderly Physical, Social and Mental Problems in 13th Region in Tehran (38).	Cross- sectional	Determination of physical, mental and social problems.	Questionnaire	The needs for systematic planned actions in order to provide physical, mental and social health care services.
Wright J, et al (1998). Development and importance of health needs assessment (20).	Review	Definition of need concept and health need assessment.	-	Introduced the main concepts and various procedures of need assessment.  Offered a systematic approach to guarantee that health services use their sources to improve people's health.  A practical strategy was required for health needs assessment at the practical level.
Wilkinson RJ, Murry AS, (1998). Assessment in primary care: Practical issues and possible approaches. (39).	Review	Definition of various approach of need assessment and methods of evaluating needs.	-	The process of need assessment could be performed by a comprehensive approach
Karlsson S, et al (2010). Professional's and older person's assessment of functional ability, health complaints and received care and service. A descriptive study (40).	Cross- sectional	Determining the level of agreement between conducted need-assessment by professional and from the point of view of the elderly.	Questionnaire	The elders had more physical problems than professionals; The need for a more comprehensive view and a preventive supportive approach in offering health care services to the older adults;
McClane SK, (2006). Screening instruments for use in a complete geriatric assessment (41).	Systematic review	A review on applied tools for assessing the health of the elderly	-	The need to develop a tool able to assess all dimension of health individually, practically, comprehensively and costeffectiveness;
Holm LA, Severinson E, (2013). A qualitative systematic review of older persons' perceptions of health, ill health, and their community health care needs (42).	Qualitative systematic review	Reporting the analysis of elderly perceptions on health and illness and their health care needs.		In elderly's health needs perception two themes emerged: Reconciliation with life; The desire to regain their identity sense of self-worth despite disability; Regarding health care services two themes emerged: being valued in health care and society; and A mental struggle to regain independence from caregivers;

As table shows, studies explored different dimension of elderly health had been focused. However, as Figure 2 shows physical health needs have been explored in majority of health needs assessment while some dimensions have rarely been explored.

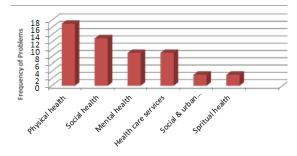


Figure 2. The most important needs were investigated in studies

Few studies mentioned other dimensions such as urban services like appropriate transportation for the elderly and the urban physical environment problems (30, 31).

In terms of health needs identified in the elderly, the most important identified needs were social support (23), social isolation, the need for care outside the home to perform activities of daily living, end of life care, financial needs after retirement and the needs of urban services, needs of appropriate transportation (31).

In cross\_sectional studies, some of which were performed by organizations and elderly departments or Ministry of health of various countries, different dimensions of health needs were investigated and in fact it dealt with analyzing gap in elderly health needs.

In physical health needs assessment, the most investigating issue was the prevalence of illnesses and disorders related to health, nutritional and functional situations. Major physical problems in elders were musculoskeletal disorders, cardiovascular disease, anxiety and stress, audio\_visual disorders, and depression in most studies (Figure 3) (27-30, 32). It also dealt with needs assessment of health and nutrition knowledge among elders and health\_care employees (25).

In studies performed on Iranian elders, major problems mentioned were skeletal\_muscular problems, cardiovascular disease, and depression (Figure 4). Female elders suffer from more problems and disorders than male elders (33-35, 37, 38).

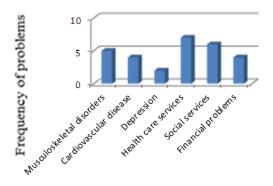


Figure 3. Main disease of the elderly in international studies

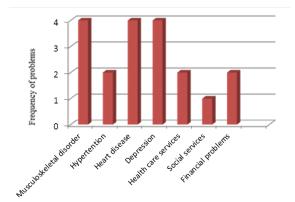


Figure 4. Main disease of the elderly in Iranian studies

#### **Discussion**

Health needs assessment can be carried out from two points of view, from people's point of view or society and from experts' point of view. On the other hand, views about need can be internal or external which are not necessarily similar or conforming. A review of texts indicates that researchers and managers have conducted external research assessing the needs of the elderly according to the researchers' judgment utilizing different questionnaires. Rarely studies explored the needs from the point of view of the elderly which may be the best index for specifying his/her health situation (44).

When investigating different papers regarding elderly health needs, it was revealed that there were different aspects regarding the health needs of the elderly. Medical models often focus on physical dimension of health for determining elderly health need, while comprehensive approach deals with all dimensions of health and in particular emphasizes on the assessment of the social and environmental aspects. Some studies had focused on holistic approaches in assessing the needs of the elderly (31).

Meeting health needs and problems related to the older adults' health should not be viewed independently without considering several factors. A wide range of determining factors such as social factors (e.g. children's separation from parents and their isolation without any physical support for doing daily activities), maltreatment and insufficient treatments, little awareness about risk factors, nutritional needs, emotional and mental needs (such as social seclusion, spiritual stress, spare time problems), economical needs (reduction of financial sources, reduction of income due to retirement) all of these affect the fulfillment of basic needs such as adequate nutrition, clothing and housing (45-48). Furthermore, factors related to health - care system (in most countries lack of health insurance for the elderly, lack of insurance coverage, insufficient availability) also affect the fulfillment of health - needs and consequently have a considerable influence on quality of elderly lives (49). Few of the conducted studies dealt with investigating all these factors and health care needs, social and civil services.

Another problem is lack of a comprehensive tool for assessing all dimensions of health need and related needs of the elderly health. Applying questionnaire to understand the health need of the elderly is faced with many important limitations and weaknesses. Existing tools limit the possibility of comparing elderly needs among different societies, as different conceptual frameworks and so different questionnaire have been used .In addition, as it was mentioned earlier, physical health needs has been explored in more details, perhaps for the reason that .accurate assessment of physical health is easier than mental, spiritual, social needs. Separating some non-physical dimensions of health is more difficult due to higher over lap and closer relationship. For example, hope is defined in some tools as mental health but in others it is defined as spiritual health (26, 41).

Review of studies and existing experiences show that dimension of physical health is assessed in most need assessment of the elderly while dimensions of mental, social and spiritual health are less explored though they are important. Among the above mentioned limitations, intrinsic limitation in the quantitative method of study in understanding the phenomenon should be also pointed. People's understanding of their needs is mainly a cognitive phenomenon and elderly perceptions and experiences about their health needs lead to a better and more comprehensive understanding of health need and its dimensions. Qualitative procedures explain the background and situations in which people live and speak. Applying need assessment by qualitative method is faced with serious limitations such as generalizability and pre-judgment and personal comments of researcher in real life despite providing a comprehensive understanding of needs stated by the elderly. With attention to the importance of need assessment in planning and promoting elderly health, it is necessary to assess needs considering perspectives of, experts and elderly, family members and their careers to obtain a deeper, more comprehensive and generalizable understanding of elderly needs by removing limitations of need assessment through one approach and one research method. Utilizing both quantitative and qualitative research methods will help enriching the scope and depth of the assessments.

Because healthy aging requires conditions and factors using findings of needs assessment studies of the health and active aging framework of the World Health Organization(5), the most important aspects of the health needs of the elderly in the conceptual framework are outlined in Figure 5.

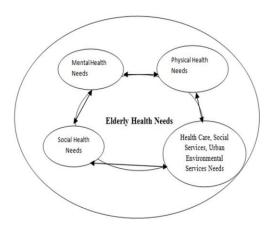


Figure 5. The conceptual framework of the elderly health need

### Conclusion

In order to investigate health needs of the elderly in addition to physical health, attention to mental, social and economic needs, provided services by health care; social organization and physical urban environment are of great importance. Investigating health needs should not be limited to physical dimension Investigation of need assessment in elders should be more focused on mental needs, as it is influenced by social, emotional interactions, functional cognitive abilities and social support. It seems that manager and researchers of elderly health should try to design comprehensive mechanisms of need assessment and make it a reference for future planning. This mechanism should enjoy both qualitative and quantitative study methods and recognize understanding of experts and family members. Also, more attention should be given to assess and fulfill the social and economic needs of the elderly. Since current procedures do not consider health as goal of life but a means for life, satisfaction from quality of life should be given higher priority in the health of the elderly,. Enjoying happiness, respect and meaning in life even with sickness which is inevitable during last years of the elderly should be considered more by the society than just providing treatment services.

#### **Study limitations**

Not all databases were utilized in the present study and the search period was limited to the publication from 1990 onward.

#### **Conflict of interest**

Hereby, the authors confirm that they have no conflict of interest that might influence their work.

#### Acknowledgment

The present study was the research project report approved by school of public health, Shahid Beheshti University of Medical Sciences, and Geriatric Research Center of University of Social Welfare and Rehabilitation Sciences.

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