

Review Article

# Effects of Nursing Care on Improving the Quality of Life in the Elderly: A Review

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**Abstract**

Elderliness is a special physical, mental, and psychological situation, which affects the quality of life (QoL) of the elderly. Those who are hospitalized or staying in nursing homes need ample interaction with nurses, who can have an effect on the QoL of the elderly. Hence, the current review study was conducted to assess the impact of nursing care on the QoL of the elderly. In this review study, articles published in domestic and foreign journals that were available in PubMed, ProQuest, Google Scholar, Scopus, and IranMedex information banks were investigated by utilizing the title search method. The search was performed without any limit in publishing time (up to 2023) using keywords such as elderly, older adult, QoL, and nursing. It was revealed that nurses can improve the symptoms of anxiety, depression, and loneliness in the elderly through their attention and care. It has been stated that by improving mental and psychological state, nurses can improve therapeutic compliance in the elderly. Moreover, it has been demonstrated that through their care, nurses not only prevent their collapse or other physical problems but also improve the physical performance of the elderly by encouraging them to exercise. The result of reviewing the articles demonstrated that nurses are able to improve the mental and psychological state as well as the motor performance of the elderly and enhance their QoL through conscious performance, care, and kindness.

**Keywords:** Nursing, Elderly, Quality of life



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## Introduction

The world population is growing old, and every country in the world is experiencing an increase in the number and proportion of the elderly in their population. Population aging will become one of the most important social changes of the 21<sup>st</sup> century. It is estimated that the number of elderly  $\geq 60$  years of age will become twofold by 2050 and threefold by 2100, and from 962 million in 2017, this number will increase to 2.1 billion in 2050 and 3.1 billion in 2100 (1). Advancements in medicine and health in the second half of the 20<sup>th</sup> century increased the life expectancy of humans (2). According to the increase in the number of elderly in different societies, it is of prominent importance to pay attention to their basic needs, physical and mental health, and quality of life (QoL) (2).

Even though the definition of elderly is related to the state of society and there is no standard numerical criterion for the elderly, most developed countries have adopted the chronological age of 60 as the definition of the elderly, which is proposed by the World Health

Organization (WHO) (3).

The WHO defines the elderly age range as follows: youngest old: 60-74, middle-old: 74-90, oldest-old: 90 and higher (4).

Old age is one of the most sensitive stages of life. It has a growing trend and will comprise a large percentage of the world population in the near future. According to the available evidence, the world population is growing old. The population of the elderly in Iran is rapidly growing, in a way that by 2050, 20% of the population will be elderly (5). Old age can have a tremendous effect on the economic and social state of the country, and Iran will soon be faced with the challenge of having an elderly population (6).

In the past, old age was known as the last stage of life accompanied by illness, disability, and seclusion. Hence, the needs and demands of the elderly failed to receive much attention in planning and policy-making. However, in the modern perspective, instead of focusing on past years, the rest of life is the center of attention. Thus, life should be pleasant in old age (5). This is the reason that



active and healthy old age in the elderly has become one of the global concerns in recent years. A healthy and active elderly person is a precious gem for family, society, and the economy. Therefore, investing in their health will benefit all societies worldwide (6,7). Considering that people live longer now, paying attention to QoL in the elderly is necessary, even when suffering from chronic conditions and diseases (8).

QoL is concerned with the satisfaction and welfare that people experience in their daily lives. In the field of geriatric nursing, QoL is a key factor in the care and support of the elderly and is an important criterion for the effectiveness of care (9). The WHO defines QoL as a multidimensional and subjective concept. This is defined as “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns (10).

QoL includes well-being and mental happiness and takes into consideration personal characteristics as well as physical, mental, and social aspects (11). QoL is widely considered an index of personal health in discovering daily life functions and welfare (12). Specifically, QoL is extremely important in the elderly because it has a close relationship with happiness and attaining goals (13). The elderly’s QoL seriously affects them due to cognitive disorders, reduced mobility, unsteady movements, incontinence (over the age of 65 years), and other characteristics, increasing the demand for medical services (14).

QoL in the elderly and geriatric nursing are among the most important indices. Approximately 50% of hospitalizations, 70% of hospital services, 90% of hospital beds, and 85% of chronic disease beds are allocated to the elderly. In 2050, 21.5% of the world’s population will be elderly. Almost 9% of Iran’s population is old, and this number will increase to 28% by 2050 (15,16). In this regard, health improvement programs are implemented to reduce the difficulties and complications connected with old age (17). Age, gender, health condition, and cultural values are important factors that affect people’s understanding of QoL (2).

In old age, humans face physical changes due to illness or natural deterioration of physical functions and social changes due to losing their role in the house and society, as well as worsening economic status, depression, loneliness, and even suicide motives. Among such changes, deterioration of physical functions due to aging negatively affects the brain’s function and results in declined cognitive function, leading to memory issues, disorganization, reduced judgement, and weak comprehension (18). Reduction in cognitive functions in the elderly makes independent daily life activities difficult, which results in depression and finally reduced QoL (13). Active and effective nursing intervention for the elderly is effective in improving their QoL (19).

It is believed that nurses have the greatest role in

promoting self-care behaviors among the elderly. Numerous studies confirm their competence and ability regarding preventive interventions in the early diagnosis of health complaints in the elderly using comprehensive and systematic assessments. Adopting a comprehensive care approach that addresses multiple complaints improves their capacity for referring the elderly to other health specialists in a multidisciplinary team if required, as well as their ability to create a trustworthy relationship with the elderly (20). The focus of private nursing is on improving the elderly patients’ understanding of their illness, pain reduction, improving QoL, and elevation of physical and mental health (14). According to the above explanations and the lack of review articles evaluating the effects of nursing on improving QoL in the elderly in Iran, the necessity for investigating the impact of nurses on QoL of the elderly was understood by the researchers, who decided to prepare a review article in this regard.

## Materials and Methods

In this review article, articles published in domestic and foreign journals that were available in ISI, PubMed, Elsevier, ProQuest, Google Scholar, Scopus, and IranMedex information banks were included using the title search technique. The search was conducted without any limit in publishing time (up to 2023) by applying several keywords such as elderly, QoL, older adult, and nursing. The inclusion criteria included all studies that had reported the effects of the nursing profession on the QoL of the elderly. In addition, the articles must have been in Farsi or English and were published in reputable scientific research journals. On the other hand, articles not related to the title were removed from the investigation.

## Results

After searching for the articles, the related ones were entered into the research process. At the end of the search, 80 articles were gathered, of which 55 remained after screening the titles and abstracts, 35 after reading the abstracts, and 11 after reviewing the full texts. Finally, seven articles were considered to have the inclusion criteria. A summary of the selected articles is provided in [Table 1](#).

## Discussion

End-of-life concerns engulf the elderly, and this vulnerable population has been a growing concern globally (26). This is due to old age processes that create numerous challenges for contemporary society (27), such as pedestrians and growing motor vehicle users, nephrology and general medicine, healthcare policies and diseases (28), mental disorders, depression (29), and other age-related psychological concerns of the elderly, such as death anxiety (30-32). An increase in the number of the elderly population also shows how general and mental health are more important in old age than other periods in one’s life (30).

**Table 1.** Specifications of the Articles Used in This Review

| Authors             | Year | Aim of Study                                                                                                                                            | Type of Study | Sample Size and Research Environment                                                                                                               | Methodology and Data Collection                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ebrahimi et al (21) | 2023 | Investigating the relationship between mental health and physical health of the elderly in nursing homes                                                | Descriptive   | The statistical population included 3,687 elderlies residing in nursing homes in Damghan and Esfahan, of which 121 were chosen by random sampling. | In this research, four questionnaires were used: The loneliness scale by Russell et al; Guilt by Kugler and Jones; Mental health by Najjarian and Dawoodi; Physical health by Lali et al. The obtained data were analyzed by structural equation modeling using Smart PLS-3 software.                                                                                                                                                                                                       | The findings showed that mental health had a positive relationship with physical health, and loneliness and guilt had the roles of reverse and meaningful mediators. According to the results, nurses and counselors working at nursing homes could have an important impact on the elderly's mental health and must pay attention to their feelings of loneliness and guilt.                                                                                                                                                                                                                                                                                                                                                                                                           |
| Chang et al (13)    | 2021 | Investigating factors affecting the QoL of the elderly under long-term care in hospitals                                                                | Descriptive   | Overall, 202 elderlies were studied who were under long-term care in three hospitals in South Korea.                                               | The elderly under study completed measures related to cognitive functions, depression, dependency on care, and interaction between nurse and patient, as well as a QoL assessment tool. A single-variable analysis was used to study the relationships between these variables. In addition, multiple linear regression analysis was utilized to investigate the amount of prediction of QoL of these variables.                                                                            | Important factors related to QoL were cognitive functions, dependency on care, and depression. The regression model with depression and dependency on care as predictive variables had a 25.7% QoL variance. The correlation between QoL and depression and dependency on care found in this study supports the evidence to expand and use nursing interventions that reduce depression and dependency on care in older populations.                                                                                                                                                                                                                                                                                                                                                    |
| Wang and Shan (22)  | 2021 | Investigating the effects of empathetic nursing on QoL and its conformity with treating the elderly suffering from cerebral infarction                  | Prospective   | In general, 136 patients hospitalized in hospitals in Heilongjiang province of China were divided into control and experimental groups.            | Patients were divided into observational and control groups. The control group received normal nursing, while the observational group was subjected to empathetic nursing. Anxiety, depression, QoL, adaptation to treatment, sleep quality, and satisfaction from nursing of the main members of the families were compared between the two groups.                                                                                                                                        | The observational group had self-rating anxiety scale and self-rating depression scale scores that were significantly higher in terms of physical function, general health, social function, emotional role, and mental health in comparison to the control group. Amounts of adaptation to treatment and satisfaction of the main family members from nursing were significantly higher in the observational group, and the Pittsburg sleep quality index scores were lower than the control group. Using empathetic nursing in elderly patients could lead to reduced depression and anxiety, improved QoL, adaptation to treatment, improved sleep quality, and satisfaction of main family members from nursing. Therefore, it is worth promoting and having clinical applications. |
| Yu et al (23)       | 2021 | Investigating the effects of early systematic rehabilitation nursing on QoL and organ function in the elderly suffering from the consequences of stroke | Prospective   | Overall, 97 elderlies with consequences of stroke were divided into test and control groups.                                                       | Control group patients received routine rehabilitation nursing, while the test group received early systematic rehabilitation nursing. Motor function of the upper extremity (the Fugl-Meyer assessment), sensory function of the upper extremity (tactile threshold and two-point discrimination), Hamilton depression scale score, ADL (Barthel index score and ADL score), and QoL scores (GQOL-74) were compared between the two groups before and three months after the intervention. | Motor function of the upper extremity, ADL, and QoL were significantly increased in the test group after the intervention. The depression scale and tactile threshold were significantly decreased in the test group after the intervention. For elderly patients suffering from the consequences of stroke, early systematic rehabilitation nursing was more beneficial for improving motor and sensory functions of the upper extremity, reducing negative psychology, and increasing ADL and QoL.                                                                                                                                                                                                                                                                                    |
| Kariuki (24)        | 2019 | Investigating the QoL of the elderly cared for in nursing homes                                                                                         | Review        | 10 articles                                                                                                                                        | The researcher used the WHOQOL/100 tool as the theoretical framework. The results were obtained from 10 articles gathered from EBSCO, ScienceDirect, and Google Scholar databases.                                                                                                                                                                                                                                                                                                          | The results showed that spiritual well-being requires having meaning and purpose in life. In physical well-being, the elderly require meaningful activities and a supportive, clean, and safe physical environment. In their social well-being, interactions between the nurses and the residents and interpersonal relationships with family and residents are important. By understanding the needs in different dimensions, nurses can plan comprehensive care. It is recommended that the continuous education of nurses with regard to caring for the elderly be about satisfying the personal needs of those under care. Moreover, it is crucial that nursing homes support the well-being of nurses so they can be more effective in providing their care.                       |

Table 1. Continued.

| Authors          | Year | Aim of Study                                                                                                          | Type of Study  | Sample Size and Research Environment                                                                              | Methodology and Data Collection                                                                                                                                                                                                                                                                                                                                                                                               | Findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------|------|-----------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gong and Hu (14) | 2018 | Studying the effects of CGA-based personal nursing intervention on QoL of the elderly suffering from chronic diseases | Interventional | A total of 300 elderly suffering from chronic diseases were randomly divided into control and observation groups. | Patients of the control group were treated with routine nursing. Based on routine nursing, the observation group was treated with CGA-based personal nursing intervention. Both groups were evaluated before the intervention and six months after discharge using the QoL questionnaire, and their effects on QoL and the amount of satisfaction from treatment and nursing were compared before and after the intervention. | After the intervention, scores of the elderly patients of the observation group were higher than those of the control group in terms of physiology, psychology, independence, social relations, environment, and general QoL, and differences were statistically significant. Moreover, satisfaction with nursing six months after discharge was considerably higher than the control group. Finally, it was stated that CGA-based personal nursing intervention can improve the nursing of elderly patients suffering from chronic diseases and improve patient satisfaction during hospitalization and in the nursing care after discharge, as well as their QoL. |
| Wren (25)        | 2016 | Studying QoL of the elderly in nursing homes                                                                          | Interventional | Nine elderlies above 65 years of age                                                                              | Subjects participated in a life review group once a week for a total of six weeks.                                                                                                                                                                                                                                                                                                                                            | LSI-Z scores were improved after the intervention, and the results of the survey demonstrated that playing a part in ADLs, socializing, attitude toward life, and living in nursing homes were improved for all the participants. The findings of this study confirmed the effectiveness of a life review protocol in improving ADL and social participation and increasing the perception of life perspective and living in a nursing environment. It was further shown that it can improve QoL and life satisfaction for the residents of nursing homes.                                                                                                          |

Note. QoL: Quality of life; CGA: Comprehensive geriatric assessment; LSI: Life satisfaction inventory; ADL: activities of daily living; GQOL-74: General Quality of Life Questionnaire-74.

Based on the report of the WHO, the population of the elderly will increase from 12% to 22% between 2015 and 2050. Many of the elderly will face major life changes, which can be losing loved ones, retiring, and dealing with physical illnesses. Some elderly might adapt to these changes. However, others may find adaptation difficult, which can make them vulnerable to mental conditions such as depression and anxiety (32). Mental illnesses and dementia can have a tremendous effect on the QoL of the elderly and their loved ones and increase the expenses of healthcare systems. Depression and anxiety are the most common mental illnesses in the elderly. In this regard, nurses can have a key role by screening, evaluating, and connecting the elderly to supports and services. For older people who require treatment for their mental illness, there are various types of treatments and evidence-based clinical options that can successfully reduce the symptoms and improve QoL (33).

One of the implicit goals of elderly care is improving QoL and maintaining the highest possible physical, mental, and psychological welfare of those suffering from mental and psychological issues. The key factors of mental health include emotional, mental, and social well-being. Mental health is defined as mental illness symptoms (negative mental health) and mental well-being (positive mental health) (34). Until today, leading health institutions in the world have highlighted the importance of QoL and welfare as a goal in each stage of life, including the elderly who suffer from mental distress (35). QoL is a multidimensional concept comprised of objective and subjective elements. The objective element includes

people's living conditions, such as housing and finances, while the subjective elements are related to the evaluation of people's lives and refer to welfare and satisfaction. Studies have reported that elderly individuals suffering from mental illnesses have lower QoL and welfare (36).

Healthcare specialists must apply practical, specific, and effective interventions to improve the outcomes of mental health and QoL among elderly people who suffer from mental illnesses because they are the desirable care outcomes for this population (34). It has been stated that adequate training received by nurses and healthcare workers about caring for the elderly suffering from dementia and depression and its incorporation into their care can have a positive effect on the symptoms of depression and anxiety of the elderly and improve their QoL (22). Empathy is defined as going deeply into the mental world of the patient, thinking from their perspective, and having a deep understanding of their inner world, and only then can it be called purposeful nursing for the patient. The reviewed studies revealed that empathetic nursing reduces anxiety and depression. Additionally, it has also been demonstrated that the rate of treatment compliance is increased when elderly patients are accompanied by nurses who provide their services with empathy.

The reasons for this phenomenon might be that patients were cared for from an empathetic perspective and targeted care was provided through empathetic nursing. Their negative feelings were dissipated since they felt true care. It has been reported that by improving the nervous and motor functions of organs, empathetic nursing

promotes the quick recovery of elderly patients suffering from the complications of stroke and results in improved QoL. This might be due to the fact that empathetic nursing can subside the negative feelings of patients and make them more active in the treatment, and as a result, greatly improves the nervous and organ functions of the patients, which ends up improving their QoL.

Moreover, aging includes structural (37), metabolic (38), and neuroendocrine changes that affect the musculoskeletal system and ultimately lead to reduced physical performance (39). The WHO defines healthy aging as “the process of developing and maintaining the functional ability that enables well-being in older age” (40). Elderly patients often suffer from physical problems and sometimes do not possess the ability to satisfy a part of their needs, or they even completely lose their ability to care for themselves, which seriously and negatively affects their QoL. Physical function disorders often result in great psychological trauma and negative feelings that, by themselves, apart from affecting the process of treating physical problems, negatively affect their QoL. Nurses working in hospitals and nursing homes who are constantly in contact with these elderly individuals can attempt to improve the physical and mental conditions of this population and increase their QoL by being fully aware of such conditions (22).

Considering the issues that many elderly experience due to their age, it is necessary that, along with other social partners, rehabilitation nurses be able to plan and execute physical exercise plans and other solutions to improve old age conditions. Supporting the elderly in society guarantees the promotion of social participation and a healthy lifestyle (41). Strategies used by nurses are for involving the participants in defining the goals, decision-making about education plans, and improving the motivation of the elderly for participation, which is a determining factor in their adherence to the plan (41).

Aging is related to a reduction in cardiorespiratory fitness and muscular function, and all of their consequences are linked to performance independence and QoL of the elderly (41). Structured physical training programs with the intervention of the rehabilitation nurse help reduce these changes. They are decisive strategies for preventing many chronic diseases or their worsening and for improving the mobility, understanding, performance, and well-being of the elderly (42). In addition to warmup exercises at the beginning of the plan and recovery exercises at the end, various plans used by these health specialists are designed with regard to international recommendations and the capabilities of the elderly. Different conditional factors are considered, including health history, musculoskeletal limitations, functional capacity, effort tolerance, and personal preferences (42).

Physical exercise plans created for the elderly by rehabilitation nurses are decisive in improving health, functional independence, welfare, and self-care (43). Physical exercise is a preventive measure along with other

factors that help provide a healthy lifestyle and prevent many health issues. Therefore, nurses pay extensive attention to it. Preventing falling has become one of the concerns of these nurses, and from this perspective, it is necessary to combine balance and resistance exercises to reduce the number of falls in the elderly (44). Maintaining the ability to perform physical exercise is essential for preventing significant health consequences, such as the ability to perform daily life activities and maintaining independence (45). The WHO emphasizes and supports the idea that healthy old age requires maintaining physical capacity and QoL (46).

The goal of nurses is to maintain or improve one or several parts of the physical capacity of the elderly, such as muscle strength, joint mobility, endurance, balance, flexibility, and aerobic exercises (43). It has been demonstrated in different studies that a multi-component exercise plan including aerobic exercises, strength training, flexibility exercises, and balance and coordination exercises, as well as daily exercise activities, are essential for maintaining and improving the functional capacity and preventing the falling of the elderly (47-51). Adherence of the elderly to exercise plans is related to their satisfaction with such plans or achievements resulting from their participation (41).

Nurses specializing in rehabilitation nursing can understand the importance of a structured physical exercise plan to consider the priorities and characteristics of the elderly (41). Overall, the findings of this research confirmed that in the case of paying attention, having enough information, and having an empathetic relationship with the elderly, nurses can improve the mental and psychological conditions of the elderly. By keeping track of and creating motivation in the elderly, nurses can create enthusiasm in them and encourage their participation in performing suitable exercises, thus improving their physical function. In general, by providing physical and emotional care, nurses can improve the physical and mental conditions of the elderly as well as their QoL. The small number of articles published in Persian was one of the limitations of our study, which focused on investigating the effects of nursing on improving the QoL of the elderly.

## Conclusion

Seven articles were studied in this review article. The results point to the key role of nurses in improving the mental and psychological symptoms of the elderly, in a way that through their attention and care, nurses can improve the symptoms of anxiety, depression, and loneliness. It was demonstrated that nurses are able to improve treatment compliance in the elderly by helping to improve mental and psychological symptoms. It was also shown that nurses, in addition to taking care of them, not only prevent their falls and the occurrence of other physical problems but can also improve their physical performance by encouraging the elderly to do physical

exercise. Eventually, it can be stated that through their conscious behavior, attention, and kindness, nurses can improve the mental and psychological conditions as well as the motor function of the elderly and improve their QoL.

#### Authors' Contribution

**Conceptualization:** Masoumeh Rostami.

**Data curation:** Setareh Ghaeini Hasaroueiye.

**Formal analysis:** Setareh Ghaeini Hasaroueiye.

**Investigation:** Masoumeh Rostami.

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#### Competing Interests

The authors have no conflicts of interest to declare.

#### Ethical Approval

Not applicable.

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