Abstract

Pandemics affect millions of people and cause many deaths worldwide. Undoubtedly, the most affected vulnerable group in the epidemic has been the elderly. The elderly population is a very heterogeneous population with various combinations of geriatric syndromes, comorbidities, and disabilities. According to the WHO report, 89% of the mortality in the COVID-19 virus is seen in individuals aged 65 and over, called the elderly. For older people, the risk of transmission is higher due to the health conditions associated with aging. The weak immune system in the elderly and the advanced state of chronic diseases can cause COVID-19 disease to be experienced more severely. The social isolation measure of the elderly during the COVID-19 process has caused physiological, physical and psychological problems. At the same time, due to the social isolation measure, the routine treatment plans of the elderly were disrupted and they were deprived of the necessary treatment. The aim of this study is to address the physiological, physical and psychological problems experienced by the elderly during the pandemic process and to determine the effects of the pandemic on the elderly.

Keywords
• COVID-19
• pandemic
• elderly

Contribution
A – Preparation of the research project
B – Assembly of data
C – Conducting of statistical analysis
D – Interpretation of results
E – Manuscript preparation
F – Literature review
G – Revising the manuscript

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Introduction

There are definitions of aging in many fields such as physiology, biology, economics and sociology. The World Health Organization (WHO) uses the chronological dimension when defining old age. This period is evaluated by WHO as “65 years and over”. However, there are also different age standards used. For example, the United Nations defines individuals aged 60 and over as elderly individuals. Aging has different economic, sociocultural, psychological, biological or physical dimensions. While defining the elderly population in various countries, it is evaluated through the social dimension of aging. Population aging or social aging refers to the proportion of the population aged 65 and over in the society as a whole. According to the data presented by the World Bank in 2019, the world population has been determined as 7 billion 674 million. Elderly individuals aged 65 and over comprise 9% of this population. According to the statistics of the Turkish Statistical Institute for the year 2020, the proportion of the elderly in the total population has reached 9.5%, and the number of the elderly living alone has reached 1 million 478 thousand 346. In 2020, 44.2% of the elderly population was male and 55.8% was female. According to the population distribution, it is thought that the proportion of the elderly population will be 10.2% in 2023, 12.9% in 2030, 16.3% in 2040 and 22.6% in 2060. When evaluated in terms of social aging, it is estimated that the number of people over 65 years old will increase from 900 million (12%) to 2 billion (22%) between 2015–2050. The proportion of children and adolescents in the population is decreasing, while the proportion of the elderly in the general population is increasing.

Increasing elderly population brings with it problems in economy, health, accommodation and adaptation to old age. Older people are more likely to get sick and have more chronic illnesses or problems later in life. The incidence of non-communicable diseases and their share in the causes of death are increasing. The increase in the incidence of chronic diseases in the society plays an important role among the reasons for the decrease in the elderly population.

In line with the information obtained during the epidemic period, it has been shown that elderly individuals are more severely affected by the disease caused by this virus. Data from China, the country where the epidemic first started, showed that elderly individuals, especially those with chronic conditions, are at higher risk. Older individuals are much more vulnerable to adverse health outcomes and mortality rates after contracting COVID-19. This increased risk likely has multiple age-related biological causes and is exacerbated by underlying age-related immune system changes and the increasing prevalence of chronic disease states in older individuals.

In general, elderly individuals, whose immune system is weaker than younger individuals, are more susceptible to infections. COVID-19, which emerged in China in 2019, brings not only physical difficulties but also mental and social difficulties in elderly individuals. These physical, mental and social challenges are among the biggest challenges faced by the elderly. It is important to continue to consider the well-being of the entire elderly population, as the general state of health is mainly affected by the quality of daily activities and medical problems. Mental health in this elderly population may be affected by physical health problems and dysfunction. Older individuals are not as resistant to infections as younger individuals. The elderly may have severe infections due to their comorbidities. They can even die from very mild infections. For this reason, it has been determined that the group most affected by the COVID-19 pandemic is elderly individuals.

When the causes of death in the world are investigated, non-communicable diseases take the first place. In 2016, noncommunicable diseases were responsible for 74% of deaths worldwide and 85% of 15 million premature deaths. The majority of these deaths are elderly people living in low- and middle-income countries.

Elderly health and pandemic

Since the first place of COVID-19 cases is the city of Wuhan in China, the first cases were reported mostly from China. Afterwards, a serious increase in cases occurred in the epidemic that spread intercontinental. According to the WHO report, 89% of the mortality in the COVID-19 virus is seen in individuals aged 65 and over, called the elderly. Although COVID-19 affects all age groups, it causes fatal results in vulnerable and disadvantaged groups. For this reason, disadvantaged and vulnerable groups should be handled more specifically and the effects of COVID-19 should be evaluated.

Considering that chronic disease control may be impaired and access to medicine may be difficult in a pandemic, treatment may be interrupted and diseases may worsen in the elderly. The COVID-19 pandemic, which affects the world, especially affects individuals with chronic diseases such as chronic obstructive pulmonary disease (COPD), coronary artery disease, diabetes, kidney disease, and increases the risk of possible complications. In this regard, it is imperative to comply with the general precautionary measures defined for
Social isolation strategies applied in this pandemic may adversely affect the ongoing treatment of patients with chronic diseases who need medication. There is no clear directive on these isolation strategies, and these negative results are based on the scientific literature together with the opinions and suggestions of international organizations. Patients with an existing treatment plan can continue treatment based on normal laboratory results. Patients with liver disease, inadequate kidney function and low blood values should repeat laboratory tests, evaluate the course and make an appropriate decision to continue treatment. During the pandemic process, doctors should be in contact with their patients regarding their treatment plans. The decision to start treatment should not be postponed during an epidemic, especially in high-risk patients.⁹

Problems seen in the elderly during the COVID-19 pandemic process

Although the risk of contracting COVID-19 is valid for all age groups, the risk of transmission is higher for the elderly due to aging-related health conditions. The weak immune system and advanced chronic diseases in the elderly may cause the COVID-19 disease to be more severe.¹⁹

Physical problems

The elderly population was one of the groups that had to stay at home for the longest time due to their vulnerability to the virus. However, long-term sedentary life causes different problems among the elderly.²⁰ The obligation to stay at home for a long time, not going out and staying away from others has reduced the risk of transmission. However, it has been revealed that social isolation measures cause physical problems such as muscle and joint pain and weight gain in the elderly.²¹

Psychological problems

Being unable to leave the house also causes psychological problems.²² Loneliness, which increases with social isolation, can lead to psychological problems such as fear, depression and anxiety in elderly individuals. In addition, the fact that they cannot meet their daily needs because they cannot go out may cause their dependence on others to increase.²³ The shyness of the elderly to go to hospitals due to their fear of the risk of contamination may prevent the elderly from receiving the medical care they need, especially in emergencies.²³ Findings from the study of Doğanay and Çopur²⁴ determined that the elderly who live in extended families and do not feel lonely are less affected by the sense of social isolation due to the disease. Factors such as losing a spouse, not being able to see children and friends can cause a feeling of loneliness, making it difficult for the elderly to overcome the pandemic process mentally.

Novotney has shown that psychological effects can lead to physiological problems.²⁵ University of California professor Steve Cole’s research on loneliness and health, stated that loneliness, which causes chronic stressful responses, impairs the immune system. In addition, it is said that older people who feel excluded or lonely have lower immunity and are more susceptible to infections and other diseases (as cited in Jones & Keynes).²⁶ Usha Rana, in her suicide study with elderly Indians, revealed that social distancing measures recommended by WHO trigger physiological problems such as neurocognitive immune system problems and cardiovascular disease in elderly individuals.²⁷

Elderly, stated that the following should be taken into account in the actions to be taken against the elderly with COVID-19. These:

• Today, due to population-related changes such as the aging of the population, all people staying at home to work, urbanization and internal migration, the elderly no longer live with extended families, but live alone or in nursing homes.
• Access to health services by the elderly is related to many social determinants such as previous experience, gender, income level, race or ethnicity. In addition, the elderly also face negative age-related discrimination and stigma. These factors make it difficult for the elderly to receive health care. It is recommended to consider all these variables in the general evaluation of the elderly.
• Elderly people living in long-term care facilities such as rehabilitation centers and nursing homes are particularly prone to side effects and COVID-19 infection.
• Seniors living alone may face barriers and need support in providing the right information, food, medicine and other basic needs in isolation.
• Some elders take care of their grandchildren. This can increase the risk of contracting COVID-19 as
they are unable to isolate themselves. In particular, younger family members living in the same house going out more often may increase the risk of infection among the elderly.

- Data from high-income countries show that although older men have higher mortality rates than women, only older women are at risk.²⁸
- During the COVID-19 pandemic, the elderly may be exposed to physical, psychological, sexual and financial abuse. Urgent public health action is needed to protect the rights of the elderly.⁷

In our country, it has been announced by the Ministry of Interior on 21 March 2020 that citizens aged 65 and over are not allowed to leave their homes and walk in open areas and parks after midnight. Because individuals aged 65 and older, particularly those with weakened immune systems and chronic illnesses, can pose serious health risks to both themselves and human life, restrictions have been imposed on the mobility of this age group. In this process, the elderly faced problems such as trusting others, social isolation, changing family dynamics, mental/psychological problems, sedentary life, not being able to benefit from daylight, risk of age discrimination, and not being able to go to health checkups. For the elderly, increased stress has caused sleep problems that may directly affect their health and, in further cases, suicidal thoughts.²⁹

Social isolation has shown some negative effects on the elderly, biologically, physiologically and psychologically. Elderly individuals who could not go out experienced functional and structural changes, needed increased protection, had problems in examination care requirements and social life activities.³⁰

State support for the elderly in the COVID-19 process

Governorships or district governorships have taken measures such as bringing hot food, water, and sanitation kits for the elderly who lived alone in their homes during the epidemic and whose basic needs could not be met. Elderly people got help from 112, 155 and 156 numbers, and also taxpayers postponed their declarations and payments until the end of the curfew. It has been reported that public banks will be able to pay pensions to retirees at home if necessary. There are also elderly care institutions in order to maintain the aforementioned services.⁹ During the pandemic process, the Ministry of Family and Social Policies³⁰ has also worked to protect all disabled and elderly people who are at risk of contracting the virus, whether they are in institutional care or not.

Conclusion

The worldwide spread of COVID-19 is a worrying and highly important public health problem. The COVID-19 pandemic has significantly affected human life, especially in health, psychological, social and economic fields, and has affected the elderly mentally, socially and functionally. It is imperative to identify the impact of the pandemic on the elderly and provide the care they need. Identifying problems early can prevent complications and hospitalizations.

In emergencies and special situations such as a pandemic, it is important to respect and support the elderly while protecting them from their negative effects. Age can become a disadvantage as the pandemic puts too much pressure on the health system and the available resources are insufficient to meet all needs. Accordingly, the elderly should have equal treatment rights with all other individuals.

From a national perspective, government, the research community, stakeholders and health policy makers play a key role in planning and implementing specific interventions for the elderly. The elderly should also be included in the decision-making mechanisms in these areas. Collaboration with doctors, nurses, communities, social workers and associations should be considered when implementing the policy. Working with solidarity groups in this area will increase the effectiveness of vulnerable groups such as women, the disabled, homeless and refugees. The pandemic is a process that forces everyone to join the fight. For this, local governments should call on the masses to support the disadvantaged groups, especially the elderly. It is very important for everyone to be sensitive about this issue.

With the support of the state, the health and safety of service areas and service providers was guaranteed during the COVID-19 pandemic, and the quality and uninterrupted provision of service was ensured. It is everyone’s responsibility to support and protect the elderly living alone in the community. During the pandemic, especially in the fight against COVID-19, the elderly are at high risk, so everyone should take precautions to prevent the spread of the disease in the community.
References


