Changes in the Quality of Life of the Elderly in the COVID-19 Situation

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Abstract

This study is to understand the quality of life of the elderly before and after COVID-19. An independent sample T-test, correlation analysis, and accounting analysis were conducted on the quality of life according to age using the Korean version of the quality of life questionnaire for 88 visitors to the welfare center.The average age of the subjects was 70.69±7.98 years old, and 36.1% of the subjects had hypertension and 13.9% arthritis as general characteristics, and 42.0% without drugs currently being taken. In the pre- and post-COVID-19 occupational group change, full-time housewives showed the highest percentage, and before COVID-19, there were no female and teacher occupational groups, but after COVID-19, 1.1% and 12.5% were female occupational groups.After COVID-19, the physical factor was 1.78±.25 in the physical factor of quality of life. COVID-19 is a factor that affects the elderly's quality of life, which implies that COVID-19 has altered the elderly's mental and daily living activity capacity, and research on programs for the elderly to enhance the elderly's quality of life is required.

Keywords: COVID-19, Quality of life, Elderly, Physical factor, Integrated factor

INTRODUCTION

COVID-19, which occurred in Wuhan, China, is an RNA virus with a gene size of 27 to 32 kb belonging to SARS-CoV-2, and is a respiratory syndrome that can be infected with humans and various animals. In March 2020, the World Health Organization (WHO) defined COVID -19 as a "pandemic," an infectious disease that is prevalent and transmitted at a serious level.[1]COVID-19 is characterized by a higher transmission power than previous respiratory diseases such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS), which has a national social distance and refraining from unnecessary going out.[2] According to a survey by the U.S. Centers for Disease Control and Prevention, 8 out of 10 deaths from COVID-19 are aged 65 or older, with the risk of COVID-19 increasing with age and hospitalization and mortality increasing significantly.[3] Due to the nationally implemented COVID-19 solution, social problems in terms of mental health as well as physical health have arisen. As a social problem in terms of mental health, recent studies have found that those who have been quarantined have a high degree of anxiety, anger, confusion, and stress. [4]

In addition to the factor of epidemic zone, age was also found to be one of the factors determining the level of psychological distress caused by COVID-19.[5]In particular, the fatality rate of COVID-19 is high at a higher age. As a result, the amount of psychological maladjustment induced by COVID-19 grew in severity with age. [6] It should be noted that the previous results do not mean that the lower age group does not suffer psychological pain from COVID-19.According to statistics from the Korea Centers for Disease Control and Prevention, 19.08% of COVID-19 infections are in their 20s and account for the highest percentage of all age groups, but the psychological pain caused by COVID-19 is underestimated because there are no COVID-19 fatalities among individuals in their 20s.However, the psychological pain they claim is severe enough that it cannot be disregarded.[5] College students, in particular, who are generally in their early and mid-20s, may notice changes in their everyday lives as a result of the implementation of social distancing regulations because they typically live in groups and interact with other people.[6] In addition, it can be seen as a group facing the aftermath of COVID-19 due to the postponement of certification tests and employment, non-face-to-face classes, and the reduction of the number of part-timers. The epidemic of infectious diseases causes psychological problems such as fear, anxiety, and post-traumatic stress symptoms to the general public as well as confirmed

patients and medical workers.[7]Previous studies on parents found that COVID-19 parents had significant parental stress following school closure[8] and avoided face-to-face interaction due to worry, uncertainty in the preventive system, and an excessive search for infection information.[9]Many studies investigating psychological disorders during the COVID-19 pandemic have reported that subjects exhibit multiple traumatic symptoms such as emotional distress, depression, stress, mood change, hypersensitivity, insomnia, and attention deficit. [10,11]

Infectious illnesses clearly create physical diseases in individuals while also causing suffering in psychological and social areas, which can eventually lead to a common consequence of the low quality of life.According to previous studies, quality of life was viewed as a strong predictor of psychological maladjustment in the event of a disaster and a variable that allows an individual's psychological state to be guessed. [12] Quality of life is an important concept that encompasses not only physical health but also psychological, social, and mental health. Since there are various fields dealing with quality of life, such as economics, politics, sociology, administration, environmental studies, and psychology, there is a tendency to interpret the quality of life in a way suitable for each field. Therefore, the definition of quality of life varies depending on the field of research.In previous studies, the definition of quality of life was "deep satisfaction obtained from daily life through very subjective value judgment," comprehensively evaluated the good and satisfactory characteristics of personal life," and lastly,"mental health, physical health, and physical health."It was defined as 'evaluation of the response to phase interest, social interest, diagnosis, and treatment'. [13] Quality of life terms are also used interchangeably as terms of similar concepts such as well-being, thestandard of life, satiation, and happiness.[13] WHO viewed health as the basis for thequality of life. Optical health is described as "not merely disease-free, but physically, mentally, and socially healthy," while the WHO defined quality of life as "your perception of your life's purpose, expectations, norms, and interests." [14] The quality of life scale developed by the WHO was produced based on the previous content and includes determinants of overall quality of life. This quality of life is one of the factors that reduce the quality of life in the event of a social disaster, and is negatively correlated with a negative psychological state. [15]Therefore, measuring the quality of life in an epidemic situation can not only confirm the change in the quality of life caused by the epidemic, but also help predict the possibility of psychological maladjustment. Disasters are causes that impair an individual's physical or mental health, and infectious illnesses, for example, are a type of societal catastrophe that affects everyone in society. It causes greater pain compared to other social disasters because it is difficult to immediately check for infection and is persistent.[16]It covers all health issues produced by disease infection, anxieties about disclosing one's information to an unspecified number of people and the social criticism that would result, and stress created by the social distancing rules' detachment of daily life. [5] So, before the COVID-19 pandemic, all individuals had a high quality of life, but that's not true. [17] It is proven that the infectious disease epidemic is a variable that affects the quality of life, but it is not a single variable that changes the quality of life. Changes in the quality of life are not limited to the epidemic but are influenced by various variables such as personal variables (age, gender, education level, etc.), physical variables, psychosocial variables, and personality variables. [16] Due to the prolonged COVID-19, the elderly with weak social resources are experiencing various social and psychological problems due to daily changes and economic difficulties. The elderly have little control over their stresses, and the stress of COVID-19 can cause exhaustion, which can impair [18] health care, so it is important to monitor the quality of life of the aged, who are more vulnerable to infectious diseases.

However, studies on the quality of life of the elderly are insufficient in the COVID-19 situation, and the need for studies comparing the quality of life of the elderly before and after the COVID-19 outbreak is highlighted. Therefore, the purpose of this study is to discover changes in the quality of life of the elderly before and after COVID-19.

SUBJECT AND METHOD

2.1 Subject

The study subjects were conducted for visitors to welfare centers located in Korea, Gyeonggi-do.After sufficiently explaining the purpose of the experiment and the test method in oral and written form to the subjects who participated in the study, consent was obtained and the test was conducted. It was conducted on the elderly

who could communicate by themselves who could respond to the contents of the survey, and a total of 88 people followed the COIVD-19 quarantine rules. In this study, a total of 88 subjects were conducted. The subjects who responded to the survey were divided into four groups by age (52-59, 60-69, 70-79, 80-92 years old).

2.2 Method

2.2.1 MeasurementTool

To measure the quality of life, a Korean version of the quality of life questionnaire produced by Gill et al and adapted by Park Se-yoon et al. [19] was used.The Korean version of quality of life is integrated (7, 9, 2, 16) 4 questions, social (2, 13, 17, 21, 28) 5 questions, spiritual (4, 18, 22, 25, 29) 5 questions, emotional (3, 4, 10, 19, 23) 5 questions, cognitive (5, 8, 20, 26, 24) 1, physical (physical) 5 questions,In this study, the internal agreement for each factor was also Cronbach's α integrated=.910, social=.933, spiritual=.896, emotional=.894, cognitive=.855, physical=.840, and ADL=.728.The internal agreement for each factor for VFQ-25 used in this study was also Cronbach's = = .885.

2.2.2 Data analysis

The data collected in this study were subjected to descriptive statistics, correlation analysis, and regression analysis on the general characteristics and measurement variables of the subject using the IBM SPSS 20.0 program.Specifically, an independent sample T-test was conducted to confirm the difference between general characteristics, visual functions, and quality of life.Correlation analysis was conducted to confirm the relationship between age and quality of life before and after COVID-19.Finally, multiple regression analysis was conducted to confirm the effect of each age on the quality of life according to before and after COVID-19.The statistical significance level of all analyses for this was set to .05.

3. RESULT

3.1 General characteristics of subjects

Of the 88 subjects, 30 were male and 58 were female, and the average age of the subjects was 70.69±7.98.26.1% of the questions asked whether they had alcohol or not, while 36.1% asked for diseases, 11.1% for high blood pressure, 13.9% for diabetes, 13.9% for arthritis, 5.6% for respiratory diseases, 11.1% for digestive diseases, 5.6% for heart diseases, and 11.1% for other diseases.When asked if they were smoking, 9.9% said non-smoking, 27.3% said yes, 42.0% said no, and 30.7% said no.When asked whether to use a smartphone, 95.5% were in use, 4.5% were not in use, 52.3% of the respondents used the computer, and 47.7% did not use the computer.

Table 1. General characteristics

Variable		n	$\%$
Gender	Male	30	34.1
	Female	58	65.9
Drinking	Yes	23	26.1
	No	65	73.9
Disease	High Blood Pressure	13	36.1
	Diabetes	4	11.1
	Arthritis	5	13.9
	Respiratory Disease	2	5.6
	Digestive Trouble	4	11.1
	Cardiac Disorder	2	5.6
	Ect	4	11.1

	Yes	1	1.1
Smoking	No	80	90.9
	No response	7	8.0
	Yes	24	27.3
Medication	No	37	42.0
	No response	27	30.7
Smartphone	Yes	84	95.5
	No	4	4.5
Computer	Yes	46	52.3
	No	42	47.7
Total		88	100.0

3.2 Occupational changes before and after COVID-19

In the change in occupational groups before and after COVID-19, full-time housewives showed the highest rate, and the ratio of administrators & managers was 13.6% before COVID-19, but 8.0% after COVID-19.In addition, before COVID-19, the occupational groups of Famer and Teacher did not appear, but after COVID-19, the occupational group of Famer was 1.1% and the occupational group of Teacher was 12.5%.

Table 2. Changes in occupation before and after COVID-19

Variable		*n*	*%*
	Homemakers	51	58.0
	Administrator & manager	12	13.6
Before COVID-19	Service & sales	13	14.8
	Technicians	4	4.5
	Ect	8	9.1
	Homemakers	39	44.3
	Professional	9	10.2
	Administrator & manager	7	8.0
After COVID-19	Service & sales	14	15.9
	Famer	1	1.1
	Teacher	11	12.5
	Technicians	3	3.4
	Ect	4	4.5
Total		88	100.0

3.3 Quality of life before and after COVID-19 and according to age.

Physical factors were higher from 80-92 to 3.22±.66 than those aged 52-59 before COVID-19, but after COVID-19, they were found to have decreased significantly to 1.78±.25 in quality of life physical factors.In terms of social factors, the age group was the highest at 70-79, but after COVID-19, the age group showed the greatest decrease in the quality of life social factors.In terms of Cognitive factors, the 70-79-year-old age group was also found to be the highest quality of life before COVID-19, but after COVID-19, the change in Cognitive competency was also found to be the largest.The emotional factor was also the highest in the 70-79-year-old age group before COVID-19, but after COVID-19, the emotional factor decreased in all four age groups. In

particular, in the age group of 80-92 years old, the range of changes in emotional factors felt after COVID-19 was found to be large.The spiral factor was found to be high in the quality of life felt before COVID-19 in the age group of 80-92 years old, but the spiral factor felt after COVID-19 significantly decreased in the quality of life.ADL was high before COVID-19 in the 70-79-year-old age group, decreased after COVID-19, and the 80-92-year-old age group showed the lowest quality of life ADL factor after COVID-19.In addition, the integrated factor was found to be high in the 79-79 age group before COVID-19, but decreased significantly in the 80-92 age group after COVID-19.

Table 3. Descriptive statistics on the quality of lifebefore and after COVID-19 among the age

QoL	Age	Before	After	Total
		M±SD	M±SD	M±SD
Physical	52-59	3.03±.08	2.23±.31	2.63±.47
	60-69	3.05±.82	1.74±.32	2.40±.91
	70-79	3.13±.72	1.69±.42	2.41±.93
	80-92	3.22±.66	1.78±.25	2.50±.89
Social	52-59	3.31±.36	2.14±.38	2.73±.70
	60-69	3.25±.75	2.05±.38	2.65±.85
	70-79	3.53±.74	1.79±.44	2.66±.85
	80-92	3.49±.71	1.80±.37	2.64±1.03
Cognitive	52-59	3.40±.40	1.97±.29	2.69±.81
	60-69	3.17±.76	1.78±.33	2.48±.91
	70-79	3.52±.80	1.63±.41	2.57±1.14
	80-92	3.29±.71	1.67±.26	2.48±.98
Emotional	52-59	3.54±.40	2.57±.24	3.06±.59
	60-69	3.27±.74	2.22±.44	2.74±.80
	70-79	3.55±.75	1.90±.51	2.72±1.05
	80-92	3.53±.63	1.60±.40	2.57±.96
Spiritual	52-59	3.37±.44	2.26±.28	2.81±.68
	60-69	3.30±.98	1.95±.32	2.62±.99
	70-79	3.52±.84	1.79±.43	2.65±1.10
	80-92	3.64±.55	1.47±.37	2.56±1.21
ADL	52-59	3.48±.38	1.67±.27	2.57±.99
	60-69	3.31±.86	1.77±.48	2.54±1.04
	70-79	3.57±.77	1.62±.44	2.59±1.17
	80-92	3.52±.69	1.78±.55	2.65±1.08
Integrated	52-59	3.46±.44	1.79±.30	2.63±.94
	60-69	3.13±.82	1.73±.35	2.43±.94
	70-79	3.50±.83	1.60±.41	2.55±1.16
	80-92	3.36±.77	1.56±.30	2.46±1.09

3.4 Two-way ANOVA analysis on the quality of life before and after COVID-19

Table 4 shows the results of a two-way ANOVA that verified whether there was a difference in thequality of life before and after COVID-19as well as by age. First, there was no effect on the physical quality of life according to the age of the participants [($F_{(3, 168)}$ = .749, p = .525, partial n2 = .01)]. However, information before and after COVID-19 was statistically significant for physical quality of life [($F_{(1, 168)}$ =

120.738, p = .001, partial n2 = .42)].

The interaction between the two factors was not significant [(F(3, 168) = 1.328, p = .267, partial n2 = .02)]. As a result of examining the difference in participants' quality of social life before and after COVID-19 and by age, analysis of the main effects before and after COVID-19 F(1, 168) = 155.900, p = .001, partial It was statistically significant at n2 = .48, but as a result of analyzing the main effect by age, it was not significant as F(3, 168) = .073, p = .974, partial n2 = .00. As a result of analyzing the interactions according to age before and after COVID-19, it was statistically significant at F(3, 168) = 2.791, p = .042, partial n2 = .05. As a result of examining the difference in participants' cognitive quality of life before and after COVID-19 and according to age, only the main effect before and after COVID-19 was F(1, 168) = 179.726, p = .001, partial n2 = .52 It was statistically significant. As a result of examining the difference between participants' emotional quality of life before and after COVID-19 and by age, analysis of the main effects before and after Corona 19 F(1, 168) = 136.787, p = .001, partial n2 = . 45, which was statistically significant, and was not statistically significant in the main effect by age. As a result of analyzing the interaction between before and after COVID-19 and age, it was statistically significant at F(3, 168) = 4.398, p = .005, partial n2 = .07. As a result of analyzing the main effects before and after COVID-19 on participants' mental quality of life according to age and before and after COVID-19, the statistical results were F(1, 168) = 151.200, p = .001, partial n2 = .47. was significant, and it was not statistically significant in the main effect by age. As a result of analyzing the interaction between before and after COVID-19 and age, it was statistically significant at F(3, 168) = 2.723, p = .046, partial n2 = .05. As a result of examining the difference in participants' ADL quality of life before and after COVID-19 and according to age, only the main effect before and after COVID-19 was statistically F(1, 168) = 197.559, p = .001, partial n2 = .54. was significant. Finally, as a result of examining the difference in participants' integrated quality of life before and after COVID-19 and according to age, only the main effect before and after Corona 19 was F(1, 168) = 187.734, p = .001, partial n2 = .53 was statistically significant. Therefore, in all age groups, the quality of life after COVID-19 was lower than before.

Table 4. Variance analysis on the quality of life before and after COVID-19 according to age

		SS	df	MS	F	p	Partial n²
Physical		39.840	1	39.840	120.738***	.000	.418
	Age	.741	3	.247	.749	.525	.013
	Prepost X age	1.315	3	.438	1.328	.267	.023
	Error	55.435	168	.330			
	Total	1179.040	176				
R² = .599 (Adjusted R² = .582)							
Social	Prepost	53.590	1	53.590	155.900***	.000	.481
	age	.076	3	.025	.073	.974	.001
	Prepost X age	2.879	3	.960	2.791*	.042	.047
	Error	57.749	168	.344			
	Total	1409.160	176				
R² = .647 (Adjusted R² = .632)							
Cognitive	Prepost	63.703	1	63.703	179.726***	.000	.517
	age1	.665	3	.222	.625	.600	.011
	Prepost X age1	2.397	3	.799	2.254	.084	.039
	Error	59.547	168	.354			

	Total	1324.720	176				
	$R^2 = .681$ (Adjusted $R^2 = .667$)						
Emotional	Prepost	50.102	1	50.102	136.787***	.000	.449
	age1	1.980	3	.660	1.801	.149	.031
	X age1	4.833	3	1.611	4.398**	.005	.073
	Error	61.535	168	.366			
	Total	1480.880	176				
	$R^2 = .617$ (Adjusted $R^2 = .602$)						
Spiritual	Prepost	64.707	1	64.707	151.200***	.000	.474
	age1	.574	3	.191	.447	.719	.008
	Prepost X age1	3.496	3	1.165	2.723*	.046	.046
	Error	71.897	168	.428			
	Total	1423.640	176				
	$R^2 = .623$ (Adjusted $R^2 = .608$)						
ADL	Prepost	78.995	1	78.995	197.559***	.000	.540
	age1	.193	3	.064	.161	.923	.003
	Prepost X age1	1.469	3	.490	1.224	.302	.021
	Error	67.176	168	.400			
	Total	1384.111	176				
	$R^2 = .682$ (Adjusted $R^2 = .669$)						
Integrated	Prepost	73.260	1	73.260	187.734***	.000	.528
	age1	.702	3	.234	.600	.616	.011
	Prepost X age1	2.056	3	.685	1.756	.158	.030
	Error	65.559	168	.390			
	Total	1310.438	176				
	$R^2 = .671$ (Adjusted $R^2 = .657$)						
	***$p<.001$						

3.5 Correlation of quality of life before and after COVID-19

Table 5 shows the correlation matrices between each variable before and after COVID-19. Prior to the COVID-19 situation, there was no significant correlation between age and quality of life. On the other hand, after the COVID-19 situation, the correlation between age and quality of life showed a significant negative correlation. Their correlation coefficients ranged from -.48 to -.23 as a whole, and were statistically verified at the significance level $p<.01$. The variable showing the highest negative correlation was age and emotional quality of life, and the correlation coefficient was -.48 ($p<.01$). The variable with the lowest negative correlation was age and physical quality of life, and the correlation coefficient was -.23 ($p<.01$).

Table 5. Correlation between variables before and after COVID-19

		Age	PHY	SOC	COG	EMO	SPI	ADL	INT
Before COVID-19	AGE	1							
	PHY	.075	1						
	SOC	.136	.668**	1					
	COG	.087	.602**	.766**	1				
	EMO	.095	.711**	.858**	.752**	1			
	SPI	.123	.496**	.657**	.641**	.696**	1		
	ADL	.095	.692**	.770**	.763**	.802**	.737**	1	
	INT	.090	.698**	.843**	.853**	.902**	.685**	.804**	1
After COVID-19	AGE	1							
	PHY	-.227*	1						
	SOC	-.288**	.301**	1					
	COG	-.241*	.491**	.390**	1				
	EMO	-.478**	.400**	.441**	.348**	1			
	SPI	-.423**	.433**	.451**	.371**	.567**	1		
	ADL	-.039	.177	.347**	.272*	.207	.226*	1	
	INT	-.192	.403**	.432**	.478**	.354**	.415**	.326**	1
$**p<.01$									

3.6 Regression of quality of life before and after COVID-19

Multiple regression analysis was performed to confirm the effect on quality of life according to age of participants before and after COVID-19. First, in the pre-COVID-19 situation, the significance of the model for the quality of life according to the age of the participants was not statistically significant as $F(7, 80) = .300$, $p = .952$.

On the other hand, in the post-COVID-19 situation, the significance of the model for the quality of life according to the age of the participants was statistically significant with $F(7, 80) = 4.401$, $p < .001$, and this model accounted for 28% of the variance in quality of life. account (adjusted $R2 = .215$). Table 6 shows the information on the regression coefficients of the independent variables input to the regression model, and it was found to have a negative effect on the emotional quality of life of age ($\beta=-.343$, $p<.01$) in the post-COVID-19 situation.

Table 6. Regression analysis on age and quality of life before and after COVID-19

variable		B	SE B	β	t	p	95.% CI	
							Low	High
Pre COVID-19	PHY	.007	.182	.006	.036	.971	-.355	.368
	SOC	.231	.253	.214	.914	.364	-.272	.734
	COG	-.020	.230	-.019	-.085	.932	-.477	.438
	EMO	-.084	.324	-.078	-.259	.796	-.730	.562
	SPI	.098	.159	.106	.617	.539	-.219	.415
	ADL	-.028	.229	-.028	-.124	.901	-.484	.427
	INT	-.056	.316	-.058	-.178	.860	-.684	.572
Post	PHY	.057	.231	.029	.247	.805	-.402	.516

COVID-19	SOC	-.128	.215	-.071	-.598	.552	-.556	.299
	COG	-.152	.243	-.075	-.626	.533	-.636	.332
	EMO	-.508	.180	-.343	-2.820[**]	.006	-.867	-.150
	SPI	-.412	.230	-.224	-1.790	.077	-.869	.046
	ADL	.186	.178	.108	1.043	.300	-.169	.540
	INT	.086	.245	.042	.351	.726	-.402	.574
[**]$p<.01$								

4. DISCUSSION

This study was conducted to identify factors affecting the quality of life of the elderly in a situation where the elderly in the domestic community live only at home due to social distancing, self-isolation, and elderly welfare facilities in order to find a way to improve the quality of life of the elderly. The World Health Organization defines thequality of life as "a broad concept that is complexly affected by an individual's health, psychological state, beliefs, social relationships and relationships with the environment". [20] This quality of life, due to isolation and social sanctions during the epidemic, leaves psychological pain accompanied by severe depression and post-traumatic stress disorder, and remains after the epidemic is over, reducing the quality of life of individuals. [21] The subjects who participated in this study showed the highest systemic diseases such as high blood pressure and diabetes, but the drug status currently being taken was lower than the proportion of subjects with the current disease. In a study on the relationship between stress and self-management efficacy perceived by the elderly, 55.6% of the average age subjects aged 71.3 did not have chronic diseases (diabetes or high blood pressure), and 46.6%   answered subjective health status was abnormal.[22]However, among the general characteristics of the elderly, health is also related to the subject's residential area, lifestyle, and occupational group, so it is believed that different results may appear even if it is a study conducted on the elderly. It can be seen that the psychological influencing factors of subjects before and after COVID-19 showed significant changes with age. This is similar to the results of previous studies showing that the subject's age was higher in their 80s than in their 60s and that their loneliness was lower. [23,24]This is thought to be the result of lower results due to isolation in the home due to social distancing, isolation, and various measures to close welfare facilities for the elderly in the COVID-19 pandemic situation.A previous study also reported that the prevalence of loneliness among Americans in the COVID-19 pandemic situation was 27%, and it was found that loneliness is related to social distancing and isolation related to COVID-19, which is related to stress and depression. [25] It is also important to maintain mental health during the COVID-19 pandemic, as self-isolation or living mainly at home can cause more stress and can lead to strong feelings of fear and anxiety. [10] As a social problem in terms of mental health, a recent study found that those who experienced isolation experienced significant levels of anxiety, anger, confusion, and stress, and the elderly 66 years and older with chronic diseases suffered from the COVID-19 pandemic. [4,26] It is thought that the change in the psychological impact of COVID-19 is larger than the young people because the elderly have chronic diseases.

In this study, it was found that the degree of participation in social activities and physical activity of the subjects decreased after COVID-19 in all age groups. These findings follow the same pattern as previous studies, which show that physical activity and social activity participation decreases in the elderly during COVID-19, and that physical activity and social activity decrease in common as a result of social distancing, isolation, and facility closure. [27] It was found that in the daily life activity ability of subjects before and after COVID-19, the ability decreased after COVID-19 in the four groups of age groups.It was found that in the daily life activity ability of subjects before and after COVID-19, the ability decreased after COVID-19 in the four groups of age groups.Previous studies related to theCOVID-19 Pandemic showed that the average degree of thequalitylife of the elderly in the domestic community was 3.66±0.52, and 87.3% of the elderly hospitalized at the Using home facility in Europe suffered from disabilities during the COVID-19 pandemic situation. [28] As there are research results showing that exercise improves the subjective quality of life and improves physical function in all age groups to lead an active daily life without inappropriate fatigue. [27] It is thought that it is necessary to prepare measures for various methods such as exercise education programs to effectively increase the quality of life by promoting health through physical activity or exercise.

5. CONCLUSIONS

This study was conducted to find a way to improve the quality of life of the elderly by identifying factors affecting the quality of life of the elderly in a situation where the elderly in the domestic community live only at home due to social distancing, self-isolation, and elderly welfare facilities. According to the results of this study, it was found that there were significant changes in mental and daily life activity ability, and overall factors after the outbreak of CVOD-19. This means that COVID-19 is a factor that changes the quality of life of the elderly, and it caused changes in the mental and daily life activities of the elderly.Therefore, it is considered that research on the development, application, and effectiveness of video physical activity programs and non-face-to-face emotional programs for the elderly should be continuously conducted to improve the quality of life of the elderly in COVID-19.

6. ACKNOWLEDGMENTS

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