Analysis And Outlook For The Aging Of Korea's Elderly **Population Through 2024**

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Abstract

Background: This study aims to examine the trends of the increasing elderly population in Korea, predict future prospects, and propose policy responses. It intends to provide foundational data for policy development and recommendations in response to the growing elderly population.

Methods: Data were collected from "Elderly Statistics 2024" published annually by Statistics Korea. Frequency and percentage data were used according to categories such as elderly population and household trends, per capita medical expenses and out-of-pocket costs, long-term care recipients, and income redistribution among

Results: Findings show that the elderly population aged 65 and above in Korea continues to increase and is expected to surpass 20% of the total population by 2025. Elderly households are projected to exceed 10 million by 2038. Out-of-pocket healthcare costs for the elderly accounted for 23.6% of total medical expenditures and are estimated to rise further. The share of elderly long-term care recipients was 10.8%, showing continuous growth. The relative poverty rate among retirees reached 39.7%, an increase of 0.4% compared to the previous

Conclusion: Reflecting these demographic changes, multidimensional institutional reforms in socioeconomic, medical, and cultural areas are needed. Such efforts will enhance the quality of life of the elderly and support the development of a sustainable social system.

Keywords: Aging, Statistics, Analysis, Korea

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I. Introduction

The growth rate of elderly single-person households is faster than the overall increase in the elderly population. According to Statistics Korea's 2022 Quality of Life Indicators, elderly single-person households increased from about 1.2 million in 2015 to approximately 1.76 million as of January 2022 [1]. During the same period, the elderly population increased by 1.37 times, while elderly single-person households grew by 1.46 times. This striking phenomenon highlights Korea's entry into a super-aged society.

The increase in single-person households, resulting from changes in family structure, is expected to accelerate further with increasing life expectancy. As the elderly live longer, the community environment in which they reside becomes a crucial determinant of their quality of life. In particular, elderly individuals living alone require sufficient, readily available community resources to maintain independence [2]. Through such support, personal needs can also be met. Thus, elderly single-person households, as individuals within their communities, must be able to interact continuously with their surroundings and lead fulfilling lives, requiring both social policy preparation and implementation.

For elderly single-person households to be recognized as independent actors in their own lives, the community environment that supports such independence must first be established. This shift in perspective can serve as a basis for policy development related to community environments [3]. Institutional adjustments are needed in diverse areas, including per capita medical expenses, long-term care ratios, and income redistribution among retirees. Furthermore, in today's context of rising demand for community-based social services, this study can provide an important foundation for designing practical and policy-oriented interventions that reflect the needs of elderly individuals living alone.

Population aging generates a variety of social challenges, one of which is the high prevalence of chronic diseases among the elderly and the resulting burden of medical costs. Chronic diseases are often first diagnosed in the 50s and, after about 10 years, frequently lead to complications. A large proportion of total lifetime medical expenditures occurs in old age [4]. In later life or at the end of life, demand for healthcare and social services such as nursing hospitals or long-term care facilities increases significantly. Therefore, how population aging influences total healthcare spending-particularly elderly medical costs under the National Health Insurance system—remains a key issue of concern.

The acceleration of aging also leads to a growing number of elderly individuals unable to perform daily activities due to dementia or stroke. Simultaneously, the spread of nuclear families and increased female labor participation have made it increasingly difficult for families to provide long-term care [5]. This has weakened the traditional family caregiving role and sharply increased social demand for long-term care. Consequently, elderly care has emerged as a serious social problem requiring policy responses at the national level.

The aging population requires income adjustments for those in retirement age. Without additional income after retirement, consumer spending is expected to be significantly constrained. In particular, it appears that more than half of the population, not just low-income earners, have not accumulated sufficient assets before retirement [6]. Therefore, systems like the National Pension and retirement pensions will play a crucial role in ensuring retirement income. Furthermore, tax benefits for pensions and savings need to be strengthened to ensure adequate retirement preparation.

This study examines trends in the elderly population and elderly households, per capita medical expenses and out-of-pocket medical expenses, the proportion of long-term care, and income redistribution at retirement age, given the recent increase in the elderly population in Korea. It also aims to predict future responses and prospects. Based on these findings, this study aims to provide fundamental data for policy development and proposals related to the growing elderly population.

II. Methods

Research designs

This study is a future-oriented descriptive survey that statistically analyzes changes in numbers according to the current status of the elderly population increase and predicts trends.

Research Data

This study utilized data collected from "Elderly Statistics 2024," which collects and organizes statistics related to the elderly, including the elderly population, economic activity status, income distribution, and changes in consciousness, published annually by Statistics Korea. These statistics are compiled by synthesizing and reanalyzing the results of various existing statistical surveys. Specifically, they analyze only items related to the elderly from various surveys conducted by Statistics Korea, such as the Population Census, Social Survey, and Household Financial Welfare Survey, and compile them into a single, comprehensive statistical dataset. The 2024 statistics on the elderly are largely composed of population/households, health, income security/economic activity, social participation/relationships, living environment, and well-being. This study utilized data on trends in the elderly population and elderly households, per capita medical expenses and out-of-pocket medical expenses for the elderly, proportion of long-term care, and income redistribution at retirement age.

Data Collection

This research data was made available to the public by the Social Statistics Planning Division on September 26, 2024, as data provided to the media to widely publicize statistical data and major activities produced by Statistics Korea. We would like to inform you that this material was used for academic purposes in this study and did not require any national permission for use. Furthermore, we would like to reiterate that this study did not falsify or artificially reprocess data. Finally, this study used data selected from only five categories, including population trends, in line with the research concept.

Data Analysis

Data were analyzed by frequency and percentage. Specific ratios were calculated as follows:

- Elderly population ratio = (Elderly population 65^+ ÷ Total population) × 100
- Old-age dependency ratio = (Elderly population 65^+ ÷ Working-age population 15–64) × 100
- Aging index = (Elderly population 65^+ ÷ Youth population 0-14) × 100
- Per capita medical expenses = Total medical expenses ÷ Insured population
- Per capita out-of-pocket = Out-of-pocket expenses ÷ Insured population
- Out-of-pocket ratio = (Out-of-pocket \div Medical expenses) \times 100

III. Results

Population Trends

Population trends indicate that in 2024, the population aged 65 and older in South Korea will reach 9.938 million, accounting for 19.2% of the total population. This figure is projected to continue growing, exceeding 20% by 2025, 30% by 2036, and 40% by 2050.

Table 1. Population trends

	Total population	65 years of age or older	Ratio	Old-age dependency ratio	Aging index
2010	49,554	5,366	10.8	14.8	67.2
2020	51,836	8,152	15.7	21.8	129.3
2024	51,751	9,938	19.2	27.4	181.2
2025	51,685	10,514	20.3	29.3	199.9
2030	51,306	12,980	25.3	38.0	312.0
2035	50,825	15,208	29.9	47.7	406.7
2040	50,059	17,151	34.3	59.1	442.2
2050	47,107	18,908	40.1	77.3	504.0
2060	42,302	18,682	44.2	90.3	636.9
2072	36,222	17,271	47.7	104.2	726.8

Elderly Households

As of 2024, there are 5.867 million households with a head of household aged 65 or older, accounting for 26.5% of all households. By household type, single-person households account for the largest proportion, at 37.4% of all households, followed by couple households (34.8%), couples with unmarried children (9.2%), and fathers or mothers with unmarried children (5.6%). The number of households comprised of seniors aged 65 and older is projected to continue growing, exceeding 10 million by 2038. Furthermore, by 2052, they are projected to account for 50.6%, or more than half, of all households.

Table 2. Number of elderly households

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						Тур	es and	composit	ion of el	derly househol	ds		
Total number of households		Senior Citizens' Household	Ratio	Couple	Ratio	Copde umanicalbiben	Ratio	Parts⊢ umanieddden	Ratio	single-person households	Ratio	Etc	Ratio
2010	17,495	2,923	16.7	985	33.7	286	9.8	149	5.1	991	33.9	512	17.5
2020	20,731	4,640	22.4	1,610	34.7	443	9.6	259	5.6	1,618	34.9	710	15.3
2024	22,180	5,867	26.5	2,043	34.8	542	9.2	328	5.6	2,197	37.4	757	12.9
2025	22,389	6,187	27.6	2,163	35.0	567	9.2	346	5.6	2,336	37.8	775	12.5
2030	23,349	7,694	33.0	2,728	35.5	667	8.7	427	5.5	3,004	39.0	868	11.3
2035	24,020	9,151	38.1	3,269	35.7	753	8.2	509	5.6	3,642	39.8	979	10.7
2038	24,274	10,025	41.3	3,578	35.7	808	8.1	562	5.6	4,022	40.1	1,055	10.5
2040	24,358	10,491	43.1	3,736	35.6	828	7.9	589	5.6	4,236	40.4	1,102	10.5
2045	24,221	11,291	46.6	3,978	35 .2	847	7.5	639	5.7	4,632	41.0	1,196	10.6
2052	23,277	11,788	50.6	4,050	34.4	841	7.1	672	5.7	4,961	42.1	1,265	10.7

Medical expenses per person and out-of-pocket medical expenses

As of 2022, the average medical cost per person for seniors aged 65 and older was 5.229 million won, an increase of 256,000 won from the previous year. In the same year, the average out-of-pocket cost per senior was 1.236 million won, an increase of 68,000 won from the previous year. The out-of-pocket cost for seniors accounted for 23.6% of total medical expenses, a 0.1 percentage point increase from the previous year. By age group, out-of-pocket costs for those aged 65-74 were KRW 1,029,000, a KRW 62,000 increase from the previous year, while those aged 75 and older had out-of-pocket costs of KRW 1,536,000, a KRW 79,000 increase from the previous year.

Table 3. Medical expenses per person and out-of-pocket medical expenses

	Table 5: Medical expenses per person and out-or-pocket medical expenses												
	Total			65 y	65 years of age or older			65-74 years old			75 years of age or older		
	Medical expensesper person	Out-of-pocket expensesper person	Out-of-pocket expenses Ratio	Medical expensesper person	Out-of- pocket expensesper person	Out-of- pocket expenses Ratio	Medical expensesper person	Out-of- pocket expensesper person	Out-of- pocket expenses Ratio	Medical expensesper person	Out-of- pocket expensesper person	Out-of- pocket expenses Ratio	
2015	1,164	293	25.2	3,573	859	24.0	2,901	685	23.6	4,587	1,121	24.4	
2016	1,284	324	25.2	3,921	955	24.4	3,205	784	24.5	4,941	1,200	24.3	
2017	1,389	349	25.1	4,162	1,015	24.4	3,372	838	24.8	5,233	1,255	24.0	
2018	1,526	375	24.6	4,487	1,046	23.3	3,614	849	23.5	5,659	1,310	23.2	
2019	1,676	413	24.6	4,796	1,117	23.3	3,881	912	23.5	6,039	1,395	23.1	
2020	1,689	417	24.7	4,759	1,106	23.2	3,851	904	23.5	6,049	1,393	23.0	
2021	1,856	464	25.0	4,974	1,168	23.5	4,070	968	23.8	6,284	1,458	23.2	
2022	2,059	513	24.9	5,229	1,236	23.6	4,271	1,029	24.1	6,624	1,536	23.2	

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Proportion of long-term care certified persons

As of $20\bar{2}3$, the proportion of those aged 65 and older eligible for long-term care was 10.8%, a 0.3 percentage point increase from the previous year. This demonstrates the continued increase in demand for long-term care due to the aging population. By gender, the proportion of women eligible for long-term care was 14.0%, 2.1 times higher than that of men (6.7%). The proportion of women eligible for long-term care increased significantly with age: 1.8% for those aged 65-69, 6.8% for those aged 70-79, and 30.9% for those aged 80 and older.

Table 4. Share of long-term care recipients (%)

	65 years of age or older		65~69 yearsold			70~79 yearsold			80 years of age or older			
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
2015	6.6	4.0	8.5	1.3	1.3	1.3	5.0	3.7	5.9	18.7	11.5	21.8
2016	7.1	4.3	9.2	1.4	1.4	1.4	5.1	3.8	6.2	20.0	12.2	23.5
2017	7.6	4.6	9.9	1.4	1.5	1.4	5.3	3.9	6.4	21.6	13.2	25.5
2018	8.4	5.1	10.9	1.5	1.6	1.5	5.7	4.3	6.9	23.6	14.6	27.9
2019	9.2	5.6	12.0	1.7	1.7	1.6	6.3	4.7	7.7	25.4	15.8	30.1
2020	9.7	5.8	12.6	1.7	1.8	1.6	6.7	4.9	8.2	26.8	16.7	31.9
2021	10.3	6.3	13.4	1.7	1.8	1.6	7.1	5.3	8.6	28.5	17.9	34.0
2022	10.5	6.4	13.7	1.7	1.9	1.6	6.9	5.3	8.3	29.2	18.2	34.9
2023	10.8	6.7	14.0	1.8	1.9	1.6	6.8	5.4	8.0	30.9	19.7	36.9

Key income distribution indicators for retirement age groups

As of 2022, the relative poverty rate for retirees aged 66 and older was 39.7%, a 0.4 percentage point increase from the previous year. In the same year, the Gini coefficient was 0.383, and the income quintile ratio was 7.11, both figures showing increases from the previous year. Notably, as of 2021, the relative poverty rate for retirees aged 66 and older in Korea is among the highest among OECD member countries.

Table 5. Major Income Distribution Indicators for Retired Age Groups

		overty rate median income)	Gini co	efficient	Income quintile ratio		
	18 to 65 years old (Working age population) 66 years of age or older (Retired Age Population)		18 to 65 years old (Working age population)	66 years of age or older (Retired Age Population)	18 to 65 years old (Working age population)	66 years of age or older (Retired Age Population)	
2015	12.9	44.3	0.337	0.427	6.09	9.27	
2016	12.9	45.0	0.338	0.425	6.12	9.05	
2017	12.6	44.0	0.337	0.419	6.09	8.82	
2018	11.8	43.4	0.325	0.406	5.67	7.94	
2019	11.1	43.2	0.317	0.389	5.40	7.21	
2020	10.3	40.5	0.309	0.376	5.07	6.64	
2021	10.1	39.3	0.310	0.378	5.15	6.92	
2022	10.0	39.7	0.303	0.383	4.98	7.11	

IV. Discussion

This study examines social phenomena resulting from changes in the elderly population, and examines and analyzes changes in the elderly population and elderly households, per capita elderly medical expenses and out-of-pocket medical expenses, proportion of long-term care, and income redistribution at retirement age. This study predicts that the elderly population aged 65 and over in Korea will continue to increase.

As ultra-low birth rates become chronic and life expectancy steadily increases, our society is facing a new phase: the rapid growth of the elderly population. Consequently, the proportion of the elderly population in the overall population is rapidly increasing, while the working-age population is rapidly declining [7]. This demographic imbalance goes beyond simple social change and is emerging as a serious problem directly linked to the nation's sustainability. Ultimately, this trend is posing a new form of social risk that threatens the nation's survival, making the search for a fundamental solution an urgent task.

This study predicts that the number of elderly households aged 65 or older in Korea will continue to increase.

As the elderly population grows, the number of senior households will accelerate, necessitating preparations. As our society rapidly transitions into an aging society, the government is also actively pursuing mid- to long-term policies for senior housing. In particular, the "Third Basic Plan for Low Birth Rate and Aging Society" announced policies aimed at creating a senior-friendly residential environment, including expanding the supply of senior-only rental housing and supporting various housing services [8]. Within this context, housing

policies for seniors are no longer optional but essential, and must be actively implemented in line with the changing times.

This study predicts that medical expenses for seniors aged 65 and older in Korea will increase.

Elderly people suffer from chronic diseases, which are not easily cured and require a lot of treatment costs. In addition, elderly people have weak bodies and have difficulty moving due to their diseases, so they need the help of others such as caregivers, and they also have to pay for this [9]. Therefore, medical expenses for the elderly are expected to continue to increase. This suggests the need for a multifaceted approach to addressing these expenses, including reducing unnecessary hospitalization costs among elderly patients.

In this study, the proportion of long-term care users among the elderly aged 65 and older in Korea is expected to increase.

As the proportion of the elderly population increases, public interest in their health is also growing, indicating that elderly health issues are emerging as a significant social issue. In Korea, the "Long-Term Care Insurance System for the Elderly" was introduced in 2008 as part of social insurance to alleviate the burden of medical expenses for the elderly [10]. As older adults age, their physical functions gradually decline, leading to an increasing reliance on commercialized medical services and long-term care services [11]. Demand for and utilization of these services are expected to continue to rise, necessitating institutional improvements and strengthening to address this trend.

This study projects that relative poverty among the elderly population will increase.

According to international comparisons, the relative poverty rate of the elderly population aged 65 and over in Korea was the highest among the 34 countries surveyed [12]. With the rapidly growing elderly population, the fact that many seniors live in poverty raises serious concerns about the future of our aging society. Poverty in old age goes beyond simple economic hardship; it leads to difficulties in maintaining even basic living standards, limits opportunities for participation as a member of society, and hinders access to appropriate medical and care services when needed [13]. To address these issues, proactive national responses and institutional improvements to address poverty among the elderly are urgently needed.

V. Conclusion

While Korea has recently garnered global recognition for its economic growth and rapid industrial acceleration, its low birth rate and aging population have created additional social challenges. This study analyzed trends in the elderly population and elderly households, per capita medical expenses and out-of-pocket medical expenses, the proportion of long-term care, and income redistribution at retirement age. Results projected growth across all sectors.

Based on this study, it is believed that multifaceted institutional improvements and changes in response to the elderly population are necessary in socioeconomic, medical, and cultural dimensions, taking into account the contemporary aspects of the elderly population.

In particular, the various social problems caused by the aging population are difficult to solve with a single policy, so an integrated approach through inter-ministerial cooperation is required. To improve the quality of life for seniors, a comprehensive support system encompassing income security, healthcare, and housing stability must be established. Creating an environment that allows older adults to actively participate as members of society is also crucial. Future policies must shift beyond simple protection to ensure the independence and dignity of older adults.

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