

Dongdaemun-Gu Healthy City Profile

2010

Dongdaemun-gu Public Health Center

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1. Population Index

1) Population by Age

In 2005, the total population of Dongdaemun-gu was 371,024 constituting about 3.8% of the total population in Seoul city. The proportion of people ages 20 to 34 and 55 to 74 in Dongdaemun-gu was relatively higher than that of Seoul city, whereas the proportion of people ages 0 to 19 and 35 to 54 in Dongdaemun-gu was relatively lower than that of Seoul city. The proportion of people who were 75 or older was similar in Dongdaemun-gu and Seoul city. The proportion of people who are aged 25 to 29 was the highest(10.3%) among all the age groups in Dongdaemun-gu.

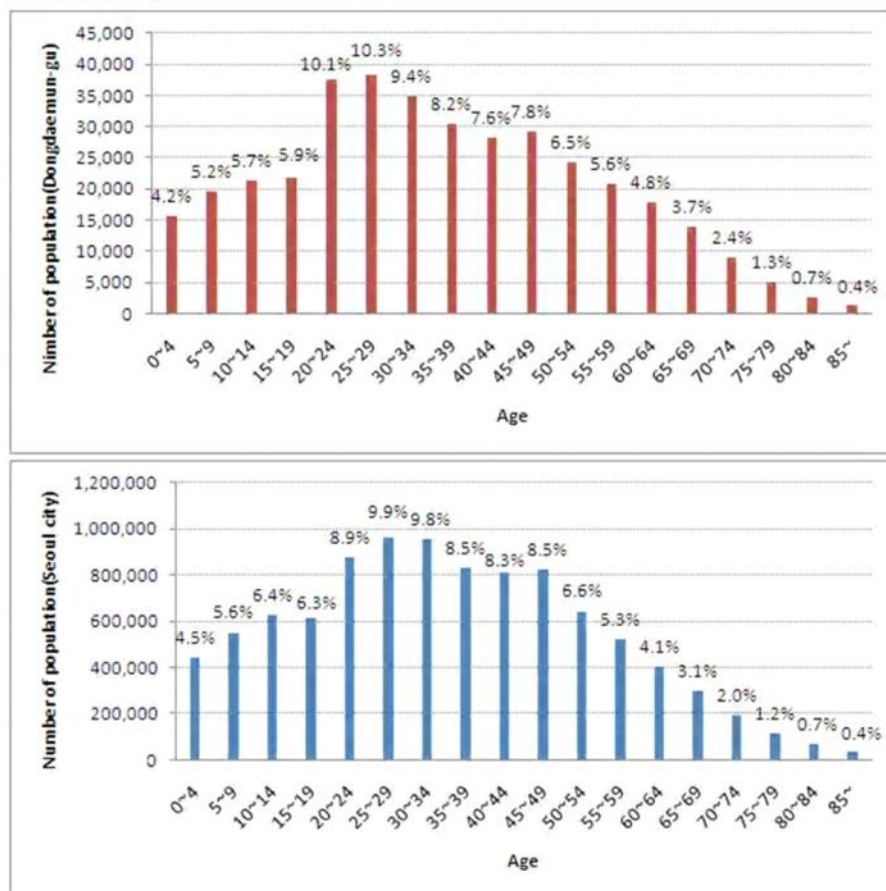


Figure 1. Population by 5-year Age Group

Data: 2005 Population Census.

2) Population by Gender

The proportion of people ages 20 to 40 was the highest in Seoul city. After the population of children decreased and the elderly population increased, the population structure of Seoul city became a constructive pyramid, which is a typical shape in industrial societies. The population structure of Dongdaemun-gu is also becoming a constructive pyramid, and the proportion of people ages 20 to 30 in Dongdaemun-gu was relatively higher than that of Seoul city.

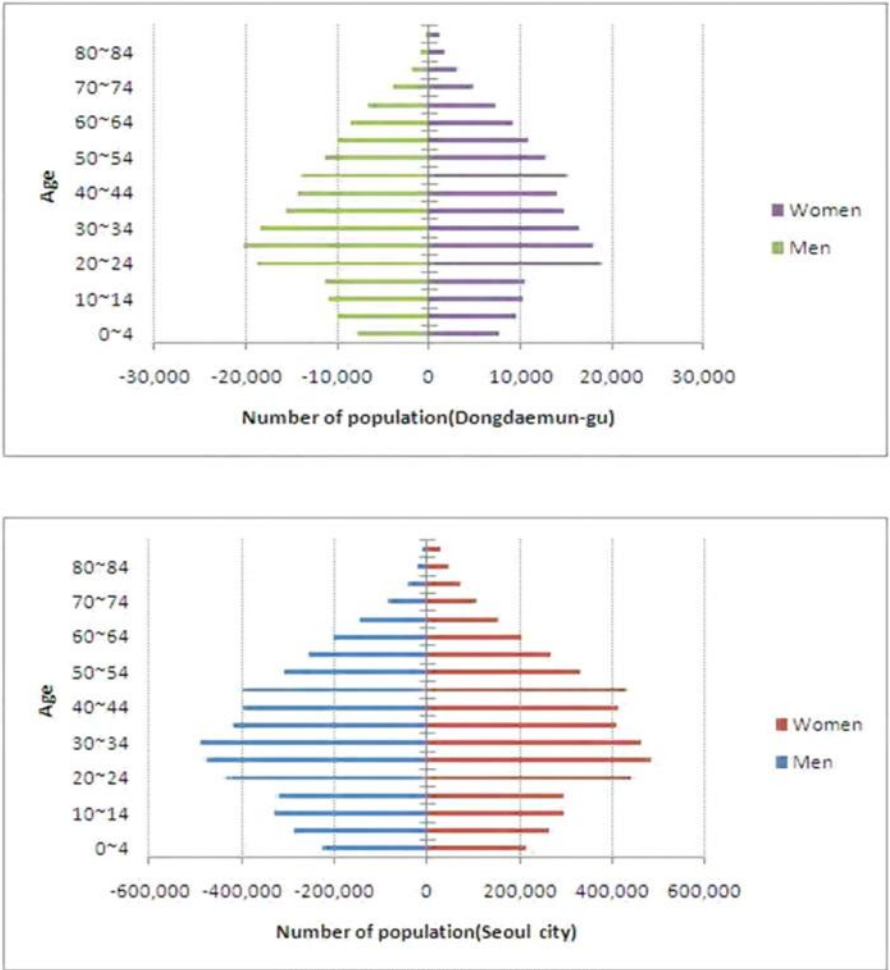


Figure 2. Population by Gender

Data: 2005 Population Census.

3) Distribution of Working Age Population

The proportion of working people(ages 15 to 64) in Dongdaemun-gu is a little higher than Seoul city. This means that the support ratio of Dongdaemun-gu(31.1%) is lower than that of Seoul city(31.4%). The proportion of elderly(ages 65 or older) in Dongdaemun-gu is also higher than Seoul city, so the elderly support ratio of Dongdaemun-gu(11.2%) is also relatively higher compared to Seoul city(9.6%). Because the proportion of children(ages 14 and under) in Dongdaemun-gu is lower than Seoul city, the aging index of Dongdaemun-gu(56.4%) is much higher than that of Seoul city(43.9%). The median age of Dongdaemun-gu(34.5) is 0.2 years higher than Seoul city(34.3). The sex ratio of children(ages 14 and under) in Dongdaemun-gu(106.2) is lower than Seoul city(108.9). In contrast, the sex ratio of working people(ages 15 to 64) and the elderly(ages 65 or above) in Dongdaemun-gu is higher than that of Seoul city. The proportion of infants(ages 0 to 1) in Dongdaemun-gu is 1.6%, much higher than that of Seoul city(0.8%). The proportion of people ages 1 to 4 is 3.4%, which is slightly lower than Seoul city. The sex ratio for this group(ages 1 to 4) is 102.9, and is also lower than that of Seoul city(106.7).

Table 1. Population Size and Sex Ratio by Age

Age	Dongdaemun-gu				Seoul city			
	Total	Men	Women	Sex ratio	Total	Men	Women	Sex ratio ¹
0-1	5,839 (1.6%)	2,960 (1.6%)	2,879 (1.6%)	102.8	81416 (0.8%)	41820 (0.9%)	39596 (0.7%)	105.6
1-4	12,772 (3.4%)	6,478 (3.5%)	6,294 (3.4%)	102.9	359104 (3.7%)	185404 (3.8%)	173700 (3.5%)	106.7
0-14	56,217 (15.2%)	28,949 (15.6%)	27,268 (14.7%)	106.2	1,619,296 (16.6%)	844,081 (17.5%)	775,215 (15.7%)	108.9
15-64	283,094 (76.3%)	143,041 (77.0%)	140,053 (75.6%)	102.1	7,432,406 (76.1%)	3,693,810 (76.4%)	3,738,596 (75.9%)	98.8
65 or over	31,713 (8.5%)	13,722 (7.4%)	17,991 (9.7%)	76.3	710,844 (7.3%)	299,221 (6.2%)	411,623 (8.4%)	72.7
Total	371,024 (100.0%)	185,712 (50.1%)	185,312 (49.9%)	100.2	9,762,546 (100.0%)	4,837,112 (49.5%)	4,925,434 (50.5%)	98.2
Total support ratio ²	31.1%				31.4%			
Children support ratio ³	19.9%				21.8%			
Elderly support ratio ⁴	11.2%				9.6%			
Aging index ⁵	56.4%				43.9%			
Median age ⁶	34.5	33.6	35.6		34.3	33.6	35.0	

Data: 2005 Population Census.

Notes: 1. Sex Ratio=(Male Population/Female Population)×100

2. Total Support Ratio={(Age 0-14+Age 65 and Over)/Age 15-64}×100

3. Children Support Ratio=(Age 0-14/Age 15-64)×100

4. Elderly Support Ratio=(Age 65 and Over/Age 15-64)×100

5. Aging Index={Age 65 and Over/Age 0-14}×100

6. Median Age is the age which divides a population into two halves.

4) Distribution of Population by Dong

The registered resident population of Dongdaemun-gu is 361,709, which can further be divided by dong or neighborhood. The population of Jangan1-dong is 36,533, and it is the highest among all the dongs in Dongdaemun-gu, followed by Imun1-dong(33,182), Jangan2-dong(32,847), and Dapsimni2-dong(32,747). The population of people ages 65 or over is the highest in Yongsin-dong(3,922) and the lowest in Hoegi-dong(1,126).

Table 2. Population Size by Dong

Dong	Number of household	Population			Aged 19 or more			Aged 65 or more		
		Men	Women	Total	Men	Women	Total	Men	Women	Total
Total	153,356	182,299	179,410	361,709	148,460	147,963	296,423	17,383	22,268	39,651
Dapsimni1	8,057	9,610	9,402	19,012	7,749	7,708	15,457	942	1,234	2,176
Dapsimni2	12,135	16,258	16,489	32,747	12,765	13,125	25,890	1,448	1,908	3,356
Yongsin	14,351	15,593	14,343	29,936	13,162	12,242	25,404	1,772	2,150	3,922
Imun1	16,042	16,583	16,599	33,182	13,796	14,021	27,817	1,415	1,965	3,380
Imun2	8,929	11,898	12,094	23,992	9,256	9,626	18,882	961	1,258	2,219
Jangan1	14,381	18,494	18,028	36,522	15,107	14,841	29,948	1,474	1,810	3,284
Jangan2	12,704	16,660	16,187	32,847	13,051	13,060	26,111	1,238	1,566	2,804
Jeonnong1	12,799	14,577	13,617	28,194	12,036	11,267	23,303	1,563	1,999	3,562
Jeonnong2	6,963	9,468	9,681	19,149	7,375	7,748	15,123	940	1,217	2,157
Jegi	12,914	14,733	13,967	28,700	12,387	11,770	24,157	1,715	2,117	3,832
Cheongnyangni	10,819	12,586	12,560	25,146	10,575	10,738	21,313	1,606	2,144	3,750
Hoegi	5,557	5,302	5,565	10,867	4,411	4,713	9,124	488	638	1,126
Hwigyeong1	8,200	8,716	8,667	17,383	7,336	7,390	14,726	810	1,022	1,832
Hwigyeong2	9,505	11,821	12,211	24,032	9,454	9,714	19,168	1,011	1,240	2,251

Data: January 2010 Dongdaemun-gu Resident Registration Population Statistics

5) Disabled Population

The total registered disabled population of Dongdaemun-gu is 15,499, which constitutes 4.2% of the total disabled population of Seoul city(368,955). The proportion of people who have retardation(54.4%) was the highest among the disabled in Dongdaemun-gu, followed by brain disease(10.7%), sight problem(10.4%), hearing problem(9.5%), and intellectual problem(4.5%). According to the level of disability, the proportion of those at level 6 in Dongdaemun-gu was the highest(23.6%), followed by 5(20.6%), 3(17.4%), 4(16.3%), 2(14.8%), and 1(7.3%). This pattern is similar with that of Seoul city.

Table 3. Population Rate by Disability Type

	Seoul city(S)	%	Dongdaemun-gu(D)	%	%(D/S*100)
Total	368,955		15,499		4.2
Retardation	190,123	51.5	8,424	54.4	4.4
Brain disease	40,545	11.0	1,662	10.7	4.1
Sight	38,950	10.6	1,611	10.4	4.1
Hearing	36,725	10.0	1,469	9.5	4.0
Speaking	2,442	0.7	88	0.6	3.6
Intellectual	21,011	5.7	692	4.5	3.3
Autism	3,025	0.8	80	0.5	2.6
Mental disorder	13,594	3.7	519	3.3	3.8
Kidney disorder	11,219	3.0	450	2.9	4.0
Heart disorder	2,816	0.8	112	0.7	4.0
Respiratory organ	2,568	0.7	117	0.8	4.6
Liver	1,553	0.4	84	0.5	5.4
Face	360	0.1	20	0.1	5.6
Urine	2,430	0.7	105	0.7	4.3
Epileptic	1,594	0.4	66	0.4	4.1

Data: 2008 Seoul Statistical Yearbook.

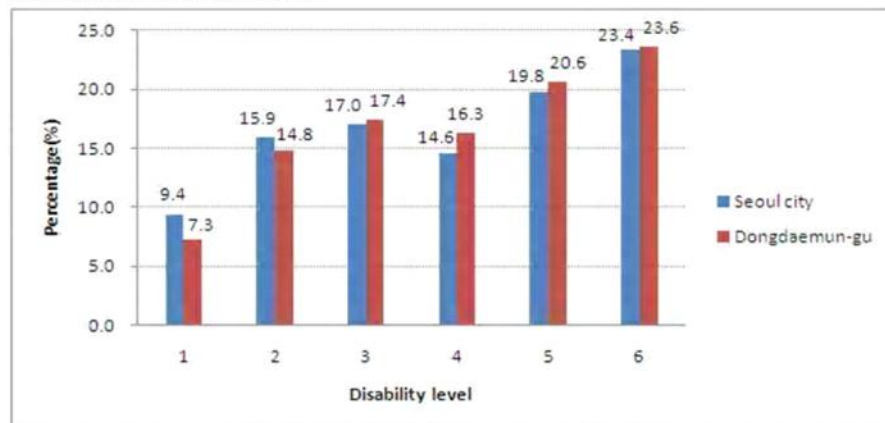


Figure 3. Distribution of Population by Disability Level

Data: 2008 Seoul Statistical Yearbook.

6) Population Change

The population of Dongdaemun-gu decreased from 1990, but it began increasing since 2000. There were no major changes in population from 2002 to 2007, and the population started to slightly decrease after 2007. The number of males in the population is consistently higher than the number of females since 1995, but this gap is narrowing.

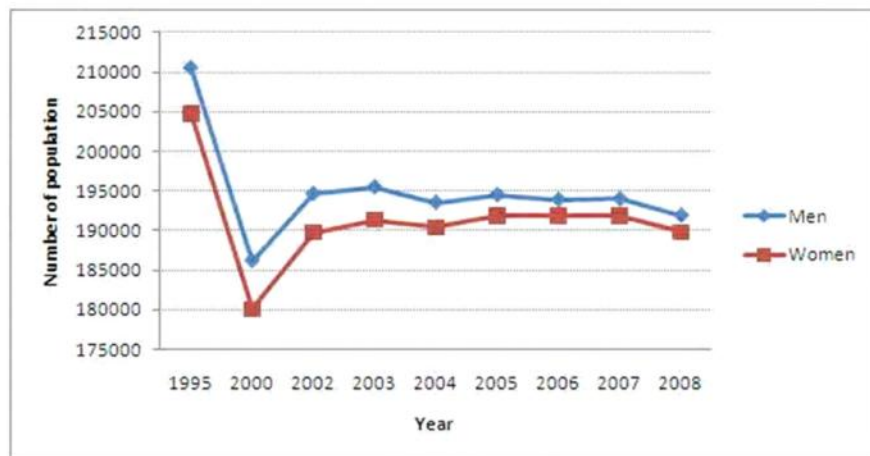
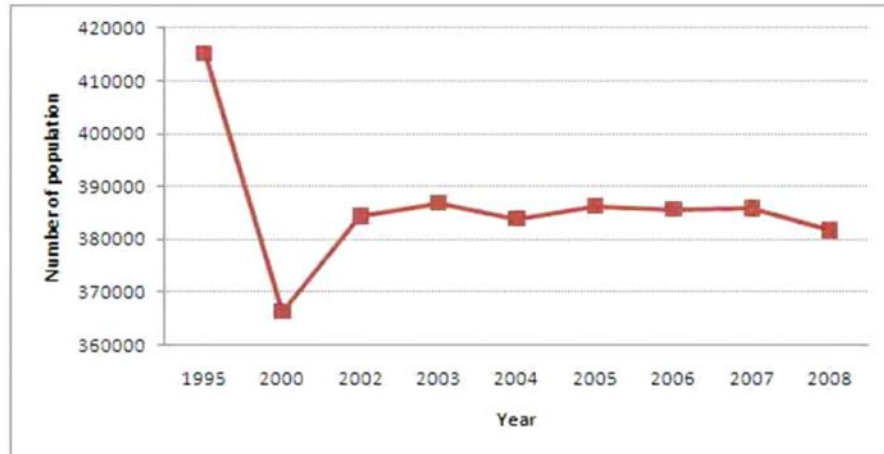


Figure 4. Population Change(1995-2008) by Year and Gender

Data: 2008 Dongdaemun-gu Statistical Yearbook, 1995 and 2000 Population Census.

7) In-migration and Out-migration

Except for 2000 and 2005, in-migration was consistently higher than out-migration since 1995. In-migration and out-migration were the lowest in 1998 right after the economic crisis(International Monetary Fund bailout) in Korea. All in-migration and out-migration trends were relatively higher in summer season(July) compared to winter season(January).

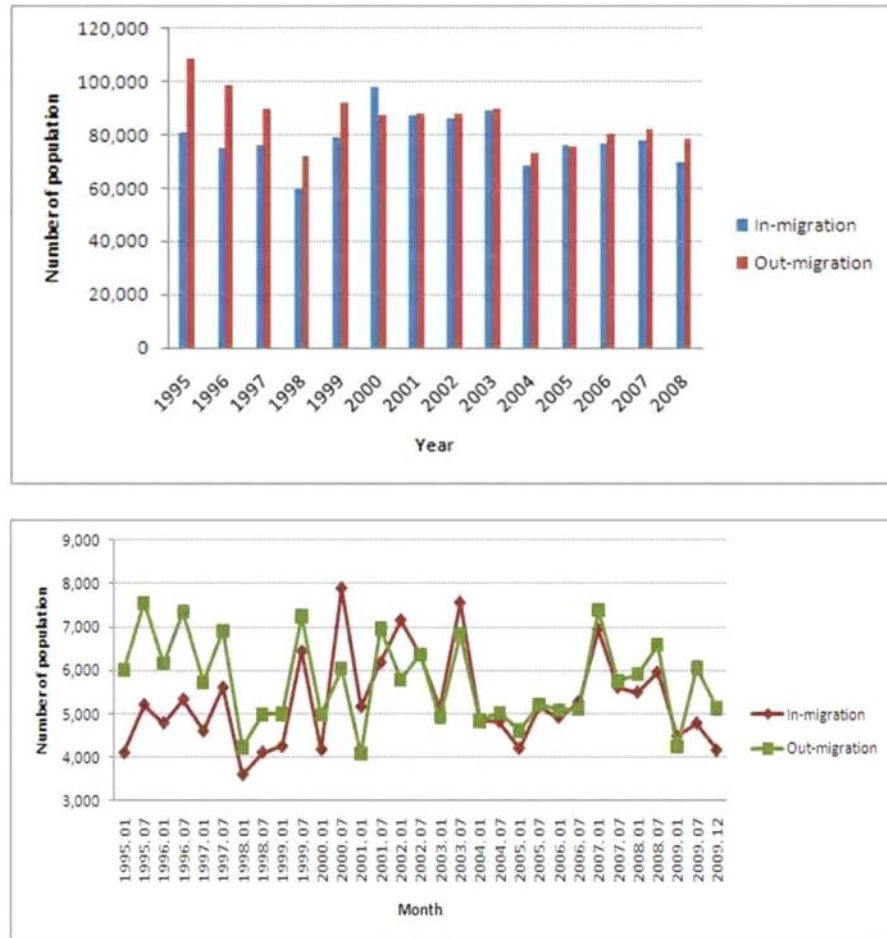


Figure 5. In-migration and Out-migration by Year and Month

Data: Korea National Statistical Office(1995.1-2009.12 Population Movements).

8) Working Age and Non-working Age Population

The proportion of people ages 65 and over has continued increasing since 1995, whereas the proportion of children(ages 15 and under) continues decreasing. This can be connected to an increase of elderly support costs.

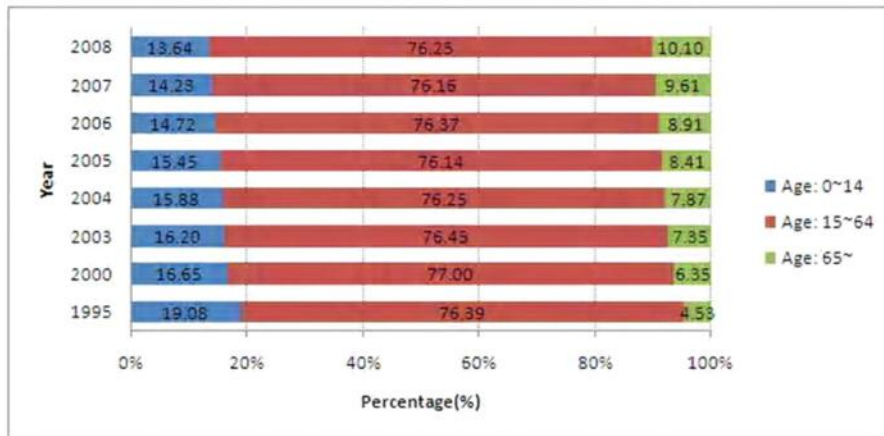


Figure 6. Rates of Working Age and Non-working Age by Year

Data: 2008 Dongdaemun-gu Statistical Yearbook, 1995 and 2000 Population Census.

9) Marital Status

Among people ages 14 and over, the proportion of married people in Dongdaemun-gu(52.6%) is a little bit lower than Seoul city, whereas the proportions of unmarried(37.2%), widowed(6.8%), and divorced(3.4%) people in Dongdaemun-gu were much higher than that of Seoul city. According to gender, the proportion of unmarried people in Dongdaemun-gu is higher in men(42.2%) compared to women(32.3%), whereas the proportions of widowed and divorced people were lower in men. The proportion of married people is the same in both genders. But the proportion of widowed women is about 5 times higher than men.

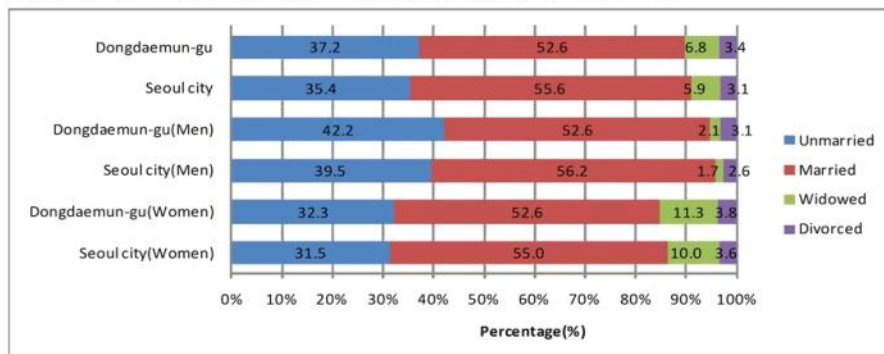


Figure 7. Rates by Marital Status

Data: 2005 Population Census.

10) Population Dynamics(Birth, Death, Marriage, Divorce)

The number of births had decreased since 2000 and started to increase after 2005. The number of deaths did not change very much from 2000 to 2007 and it started to decrease slightly after 2008. The number of marriages did not change from 2000 to 2008. The number of divorces had increased from 2000 and then started decreasing since 2003. These patterns of population dynamics in Dongdaemun-gu were very similar with Seoul city.

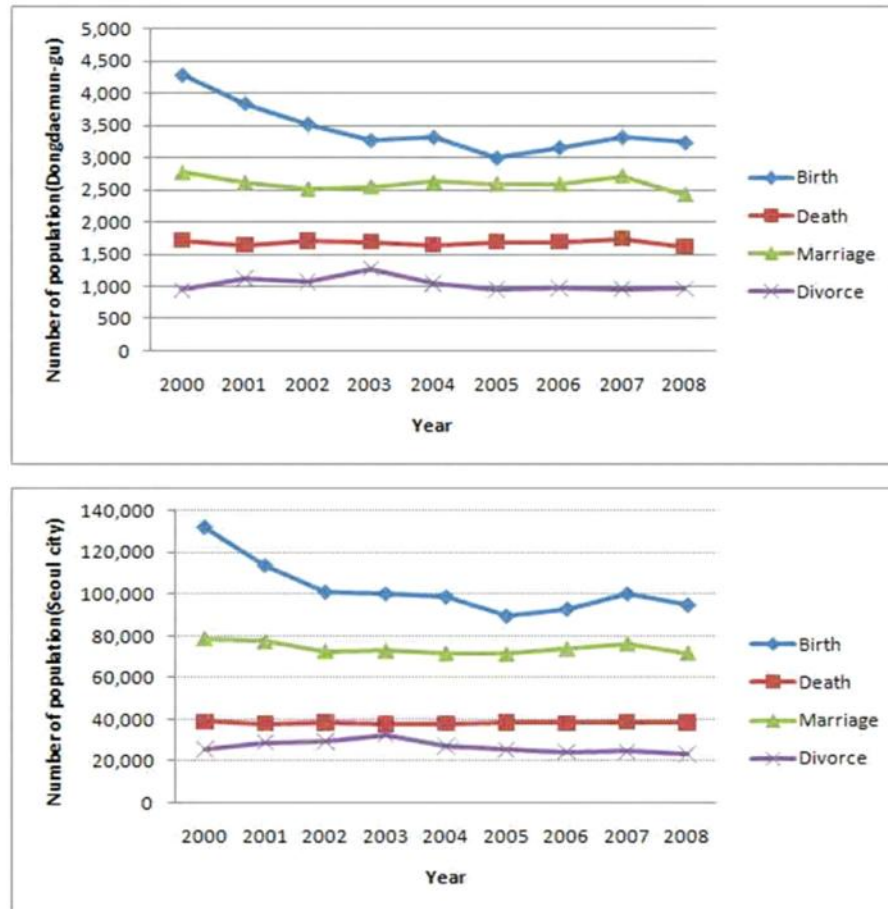


Figure 8. Population Dynamics(Birth, Death, Marriage, Divorce) Change

Data: Korean Statistical Office(2000~2008 Population Dynamics).

11) Population Density

The population density of Seoul is 16,221 per square kilometer, and this is 34.1 times higher than Korea's total population density(475/km²). Among 25 districts in Seoul city, Yangcheon-gu has the highest population density(28,890/km²) followed by Dongdaemun-gu(27,173명/km²).

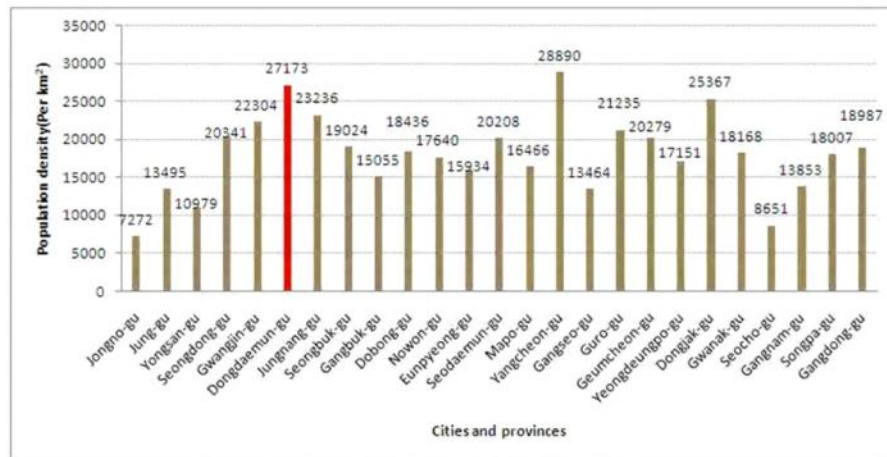
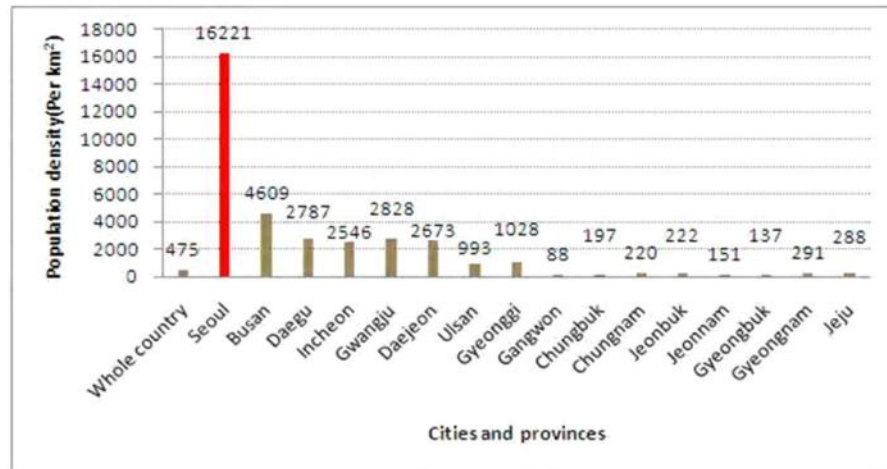


Figure 9. Population Density by Cities and Provinces

Data: 2005 Housing Census, 2005 Population Census.

12) Deaths

The number of deaths has slightly increased since 2005 but began to decline in 2008. According to gender, the number of deaths in men did not change very much, whereas the number of deaths in women was increasing until 2007 when it began to decrease. The number of deaths in men was consistently higher than women from 2005 to 2008. These patterns in Dongdaemun-gu are similar with Seoul city.

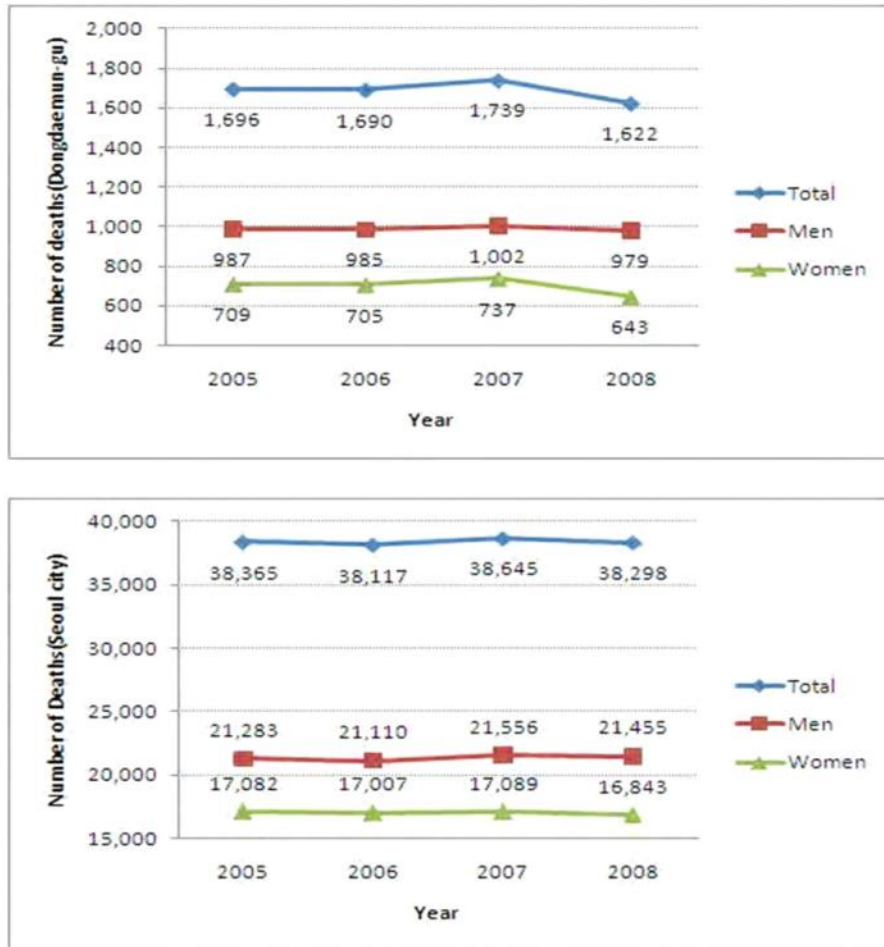


Figure 10. Changing Trends in The Number of Deaths

Data: Korean Statistical Office(2005~2008 Cause of Death)

13) Cause of Death

Neoplasm constitutes the highest proportion(29.8%) among all the causes of death in Dongdaemun-gu followed by diseases of the circulatory system(21.2%), symptoms and signs not elsewhere classified(12.4%), external causes of morbidity and mortality(11.8%), and endocrine, nutritional and metabolic diseases(5.1%); and these five causes of death constitute 80.3% of all the causes of death in Dongdaemun-gu. The causes of death in men were not very different. Among men, Neoplasm constitutes the highest proportion(33.3%) among all the causes of death followed by diseases of the circulatory system(21.0%), external causes of morbidity and mortality(12.9%), symptoms and signs not elsewhere classified(9.4%), and endocrine, nutritional and metabolic diseases(4.3%). These patterns are very similar with Seoul city.

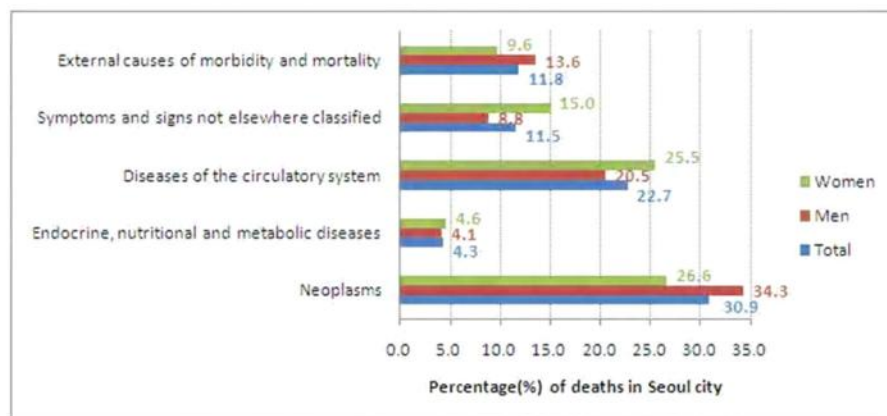
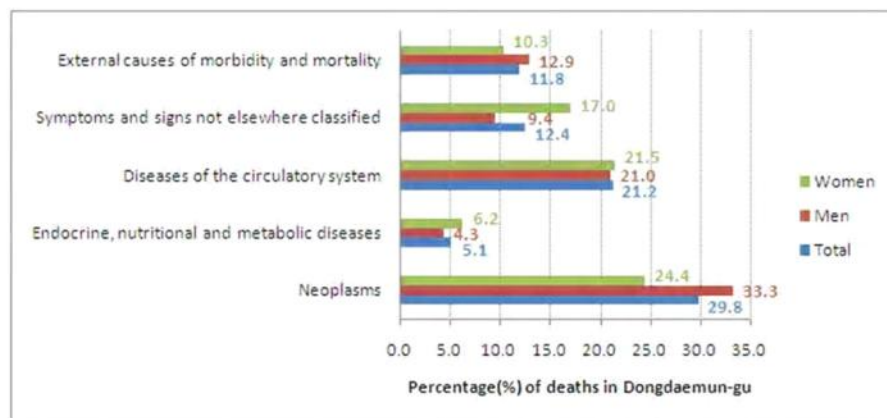


Figure 11. Percentage of Deaths by Cause of Death

Data: Korean Statistical Office(2008 Cause of Death).

2. Health Index

1) Perceived Health Status

Perceived health status is an important health index that can predict various health problems(including death rate), and it is being used all over the world. According to the 2008 Community Health Survey, 50.9% of participants in Seoul city(total 21,928) perceived their health status as very good or good, and 49.6% of participants in Dongdaemun-gu(total 838) perceived their health status as very good or good. Men's perceived health status was higher compared to women in Seoul city, and this gender difference was more notable in Dongdaemun-gu(men: 56.8%, women: 42.3%).

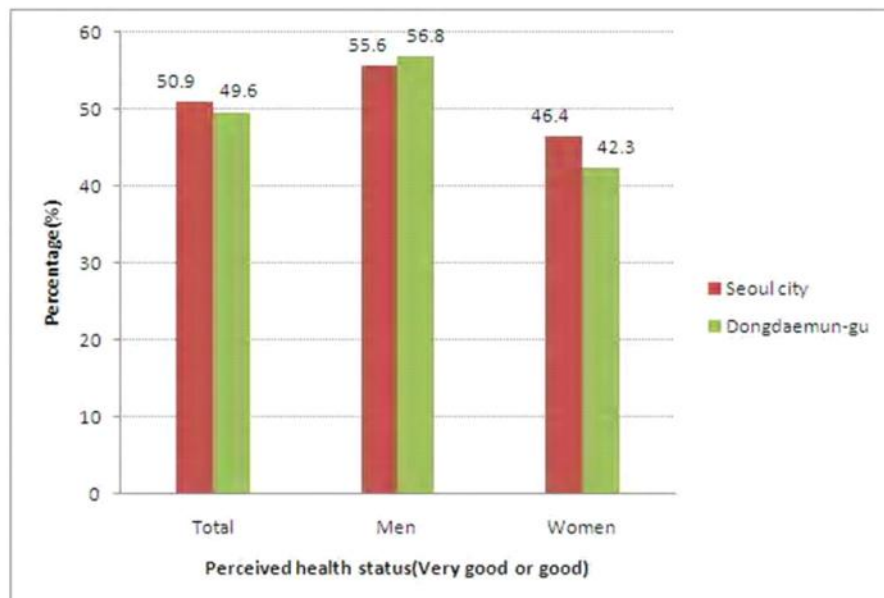


Figure 12. Rates of Perceived Health Status

Data: 2008 Community Health Survey.

2) Obesity

We considered people with a Body Mass Index(BMI) of 25 or higher as obese. The obesity rate of Dongdaemun-gu was 23.9%, and it was 3.2% points higher than Seoul city(20.7%). This pattern was similar in both genders. The obesity rate in men(Dongdaemun-gu: 30.3%, Seoul city: 26.7%) was higher than women(Dongdaemun-gu: 17.5%, Seoul city: 14.9%) in both places. According to a recent international research article about Korean adults¹⁾, obesity was a cause of all diseases, and it was also directly related with high mortality rates.

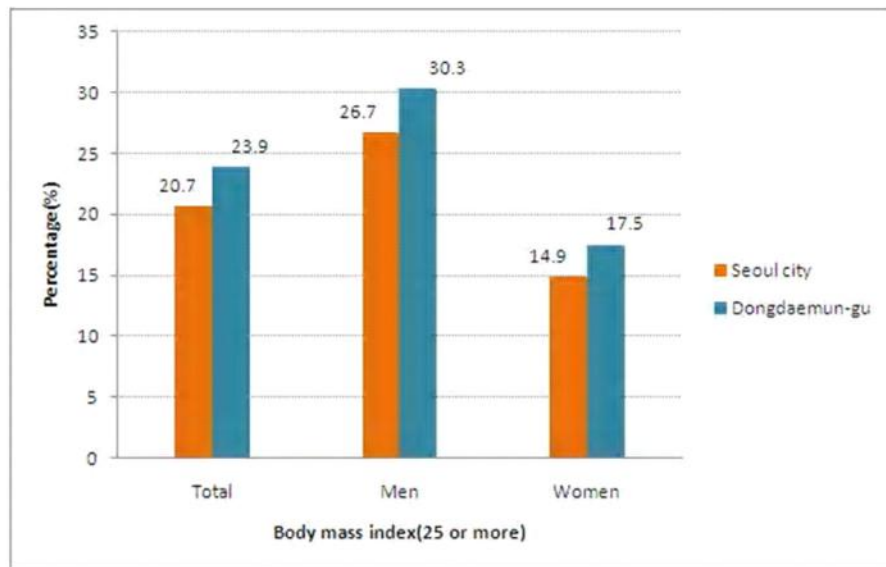


Figure 13. Rates of Obesity

Data: 2008 Community Health Survey.

Notes: BMI=Weight(kg)/Height²(m²). According to obesity criterion of Asians suggested by WHO (2000)²⁾, Obesity: BMI is 25.0 and over.

- 1) Jee SH, Sull JW, Park J, Lee SY, Ohrr H, Guallar E. Body-Mass Index and Mortality in Korean Men and Women. The New England Journal of Medicine 2006;23:779-787.
- 2) World Health Organization. The Asia-Pacific perspective: Redefining obesity and its treatment. Health communications Australia Pty Limited 2000.

3) Stress

The proportion of people who feel very high or high stress in Dongdaemun-gu(42.0%) was much higher than that of Seoul city(30.4%). According to gender, men(Dongdaemun-gu: 46.6%, Seoul city: 31.6%) feel more stress than women(Dongdaemun-gu: 37.5%, Seoul city: 29.3%) in both places. However, the difference in stress rates between Dongdaemun-gu and Seoul city was more notable in men.

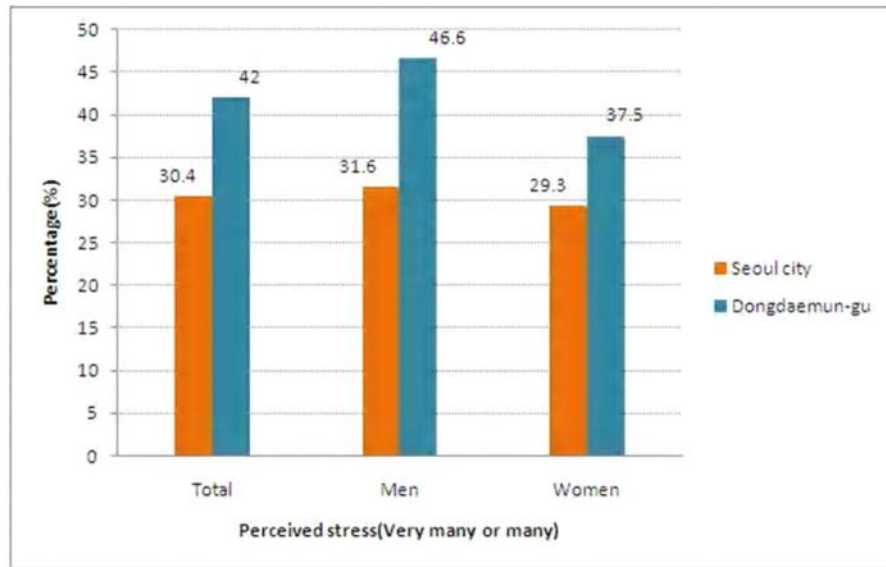


Figure 14. Rates of Stress

Data: 2008 Community Health Survey.

4) Depression

The proportion of people who have experienced depression for more than 2 weeks during the past year in Dongdaemun-gu was 7.9%, which was lower than that of Seoul city(8.2%). According to gender, the depression rate of Dongdaemun-gu(5.9%) was higher than Seoul city(5.3%) in men, whereas among women the depression rate was lower in Dongdaemun-gu(9.9%) compared to Seoul city(10.9%).

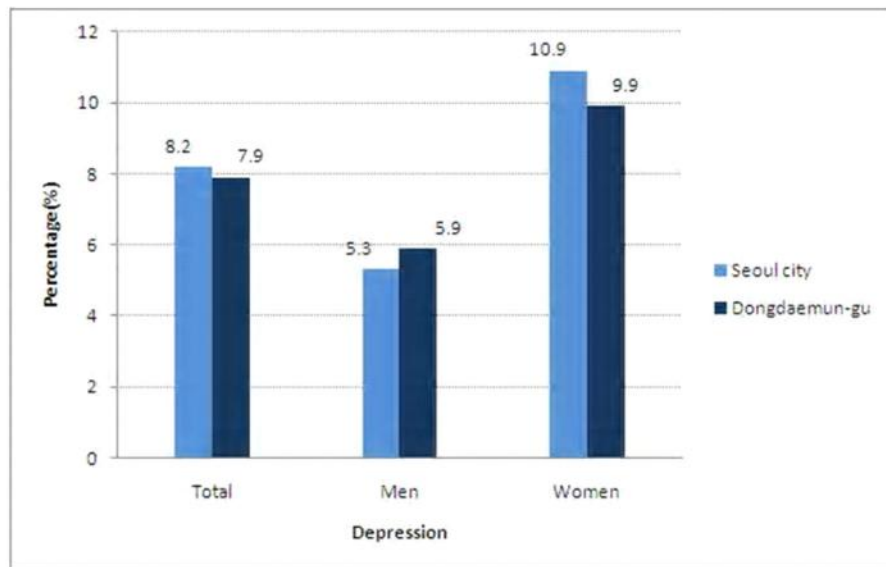


Figure 15. Rates of Depression

Data: 2008 Community Health Survey.

5) Suicide Ideation

Seven point four percents of Dongdaemun-gu residents have experienced suicide ideation more than once during the past year, which was slightly lower than that of Seoul city(7.5%). In both Seoul city and Dongdaemun-gu, the suicide ideation rate in women was higher than in men, and this gender difference was more notable in Seoul city(men: 4.7%, women: 10.2%).

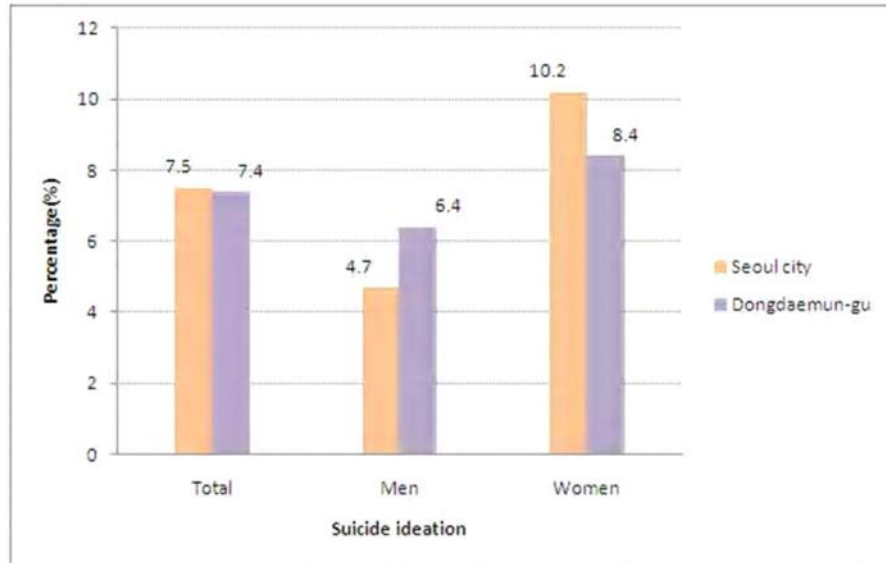


Figure 16. Rates of Suicide Ideation

Data: 2008 Community Health Survey.

6) Patients by Disease

Among people who had a health screening in 2007, the proportion of people who had diseases that need to be cured was 5.23% in Dongdaemun-gu, which was a little lower than in Seoul city(5.90%). According to the type of disease rates in Dongdaemun-gu, the proportion of those with hypertension(1.60%) was the highest followed by kidney disease(1.10%), liver disease(1.04%), hyperlipemia(0.99%), diabetes(0.98%), anemia(0.22%), and tuberculosis or other pulmonary diseases(0.05%). Compared to Seoul city, Dongdaemun-gu had lower disease rates in all the categories of disease.

Table 4. Number of Patients by Disease

		(Unit: person)	
		Seoul city	Dongdaemun-gu
Health screening		1,708,757	54,628
Patient with disease	Number of patients	100,829	2,857
	Rate(%)	5.90	5.23
Pulmonary disease	Number of patients	1,015	26
	Rate(%)	0.06	0.05
Hyper tension	Number of patients	30,509	873
	Rate(%)	1.79	1.60
Hyperlipemia	Number of patients	20,114	540
	Rate(%)	1.18	0.99
Liver disease	Number of patients	23,482	569
	Rate(%)	1.37	1.04
Diabetes	Number of patients	17,899	538
	Rate(%)	1.05	0.98
Kidney disease	Number of patients	18,759	602
	Rate(%)	1.10	1.10
Anemia	Number of patients	5,402	122
	Rate(%)	0.32	0.22

Data: National Health Insurance Corporation(2007 Result Analysis of Health Examination).

3. Health Care Index

1) Medical Institution

There are 599 medical institutes and 5,022 beds in Dongdaemun-gu, and these constitute 4.04% and 6.91% of the total number of medical institutes and beds respectively in Seoul city. According to the type of medical institute, there are 5 general hospitals, 8 hospitals, 237 clinics, 1 special hospital, 5 long-term hospitals, 4 dental hospitals, 130 dental clinics, 2 oriental hospitals, 206 oriental clinics, 1 maternity clinic, 1 public health center, and 1 public health center branch office.

Table 5. Number of Medical Institutes and beds

		Dongdaemun-gu(D)	Seoul city(S)	% (D/S)*100
Total	Medical institutes	599	14,818	4.04
	beds	5,022	72,705	6.91
General hospital	Medical institutes	5	60	8.33
	beds	2,076	32,581	6.37
Hospital	Medical institutes	8	153	5.23
	beds	726	12,399	5.86
Clinic	Medical institutes	237	7,041	3.37
	beds	868	16,325	5.32
Special hospital	Medical institutes	1	16	6.25
	beds	500	3,867	12.93
Long-term hospital	Medical institutes	5	51	9.80
	beds	486	5,443	8.93
Dental hospital	Medical institutes	4	63	6.35
	beds	31	104	29.81
Dental clinic	Medical institutes	130	4191	3.10
	beds	0	7	0.00
Oriental hospital	Medical institutes	2	28	7.14
	beds	330	1,893	17.43
Oriental clinic	Medical institutes	206	3,211	6.42
	beds	0	77	0.00
Maternity clinic	Medical institutes	1	4	25.00
	beds	5	9	55.56
Affiliated clinic	Medical institutes	0	45	0.00
	beds	0	29	0.00
Public health center	Medical institutes	1	25	4.00
	Branch office of public health center	1	16	6.25

Data: 2008 Seoul Statistical Yearbook.

2) Medical Human Resources

There are 5,268 medical workers in Dongdaemun-gu, which constitute 5.07% of the total medical workers in Seoul city(103,868). Assistant nurses(1,695) comprise the majority of medical workers in Dongdaemun-gu followed by doctors(1,042), medical technicians(992), medical affairs recorder(712), pharmacists(353), oriental doctors(318), maternity nurses(69), dentists(52), nurses(3).

Table 6. Number of Medical Human Resources

	(Unit: person)		
	Dongdaemun-gu(D)	Seoul city(S)	% (D/S)*100
Total	5,268	103,868	5.07
Doctor	1,042	22,616	4.61
Dentist	52	730	7.12
Oriental doctor	318	6,048	5.26
Pharmacist	353	3,946	8.95
Maternity nurse	69	1,978	3.49
Nurse	3	151	1.99
Assistance nurse	1,695	30,556	5.55
Medical technician	992	23,176	4.28
Medical affairs recorder	712	14,072	5.06

Data: 2008 Seoul Statistical Yearbook.

3) Availability of Needed Medical Services

The proportion of people who were unable to obtain needed medical services during the past year in Dongdaemun-gu was 20.7%, and this was much higher than that of Seoul city. More women were unable to obtain needed medical services compared to men in both Seoul city and Dongdaemun-gu, and this gap was more notable in Seoul city compared to Dongdaemun-gu.

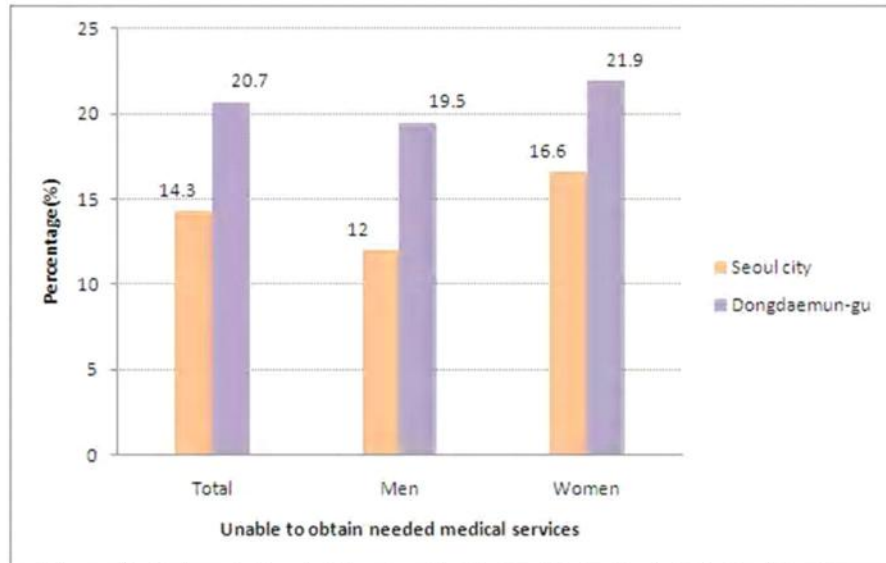


Figure 17. Rates of People Who Are Unable to Obtain Needed Medical Services

Data: 2008 Community Health Status.

4) Health Insurance Coverage

The proportion of people with health insurance coverage in Dongdaemun-gu constitutes 3.49% of total health insurance coverage in Seoul city(10,257,359). The proportion of people who receive employer-based health insurance coverage in Dongdaemun-gu constitutes 3.07% of total employer-based health insurance coverage in Seoul city.

Table 7. Health Insurance Coverage

(Unit: person)

	Health insurance coverage	Employer-based				Region	
		Work place	Application	Member	Dependants	Member	Household
Seoul city(S)	10,257,395	261,787	6,464,541	2,627,243	3,837,298	3,792,854	1,789,353
Dongdaemun-gu(D)	358,376	7,639	198,168	82,603	115,565	160,208	75,864
%(D/S*100)	3.49	2.92	3.07	3.14	3.01	4.22	4.24

Data: National Health Insurance Corporation(2008 Health Insurance Statistical Yearbook).

5) Medical Expense Coverage

The number of medical expense recipients in Dongdaemun-gu is 9,874, comprising 4.03% of the total medical expense recipients in Seoul city. Among medical expense recipients in Dongdaemun-gu, the proportion of type1 recipients is 54.58%, which is a little lower than that of Seoul city(56.62%).

Table 8. Medical Expense Coverage

(Unit: person)

	Total medical expense(A)	Medical expense(Type1)		Medical expense(Type2)	
		Recipient(B)	B/A	Recipient(C)	C/A
Seoul city(S)	245,085	138,767	56.62%	106,318	43.38%
Dongdaemun-gu(D)	9,874	5,389	54.58%	4,485	45.42%

Data: National Health Insurance Corporation(2008 Medical Expenses Statistical Yearbook).

6) Health Examination

Fifty-four point zero-three percents of Dongdaemun-gu's residents received a health examination, just under the rate for Seoul city(55.12%). According to gender, the health examination rate for men was higher than women in both Seoul city and Dongdaemun-gu.

Table 9. Number of People Who Received Health Examination

		Target population	Examined	Rate(%)
Seoul city	Total	2,759,141	1,520,918	55.12
	Men	1,449,295	828,111	57.14
	Women	1,309,846	692,807	52.89
Dongdaemun-gu	Total	101,107	54,628	54.03
	Men	53,603	29,156	54.39
	Women	47,504	25,472	53.62

Data: National Health Insurance Corporation(2007 Result Analysis of Health Examination).

7) Cancer Screening

The cancer screening rate in Dongdaemun-gu was 35.91%, which was higher than Seoul city(33.31%). Women showed higher cancer screening rates than men in both Seoul city and Dongdaemun-gu.

Table 10. Number of People Who Received Cancer Screening

(Unit: person)

		Dongdaemun-gu			Seoul city		
		Total	Men	Women	Total	Men	Women
Total	Target	83,468	38,546	44,922	2,523,884	1,146,115	1,377,769
	Examined	29,971	12,148	17,823	840,738	324,702	516,036
	Rate(%)	35.91	31.52	39.68	33.31	28.33	37.45
Stomach	Target	77,551	38,523	39,028	2,340,123	1,145,262	1,194,861
	Examined	26,090	11,594	14,496	703,137	306,717	396,420
	Rate(%)	33.64	30.10	37.14	30.05	26.78	33.18
Colorectal	Target	48,873	23,670	25,203	1,449,365	691,334	758,031
	Examined	12,031	5,493	6,538	344,339	152,610	191,729
	Rate(%)	24.62	23.21	25.94	23.76	22.07	25.29
Liver	Target	4,156	2,438	1,718	136,159	78,010	58,149
	Examined	1,533	844	689	45,575	23,387	22,188
	Rate(%)	36.89	34.62	40.10	33.47	29.98	38.16
Breast	Target	38,971	0	38,971	1,192,978	0	1,192,978
	Examined	15,127	0	15,127	427,686	0	427,686
	Rate(%)	38.82	0	38.82	35.85	0	35.85
Cervical	Target	44,921	0	44,921	1,377,595	0	1,377,595
	Examined	14,490	0	14,490	408,313	0	408,313
	Rate(%)	32.26	0	32.26	29.64	0	29.64

Data: National Health Insurance Corporation(2007 Result Analysis of Health Examination).

4. Social Welfare Index

1) Number of Children and Day Care Facilities

Dongdaemun-gu has 213 day care facilities, constituting 3.80% of the total number of day care facilities in Seoul city(5,600). Day care facilities can be divided into six types: Dongdaemun-gu has 100 private day care facilities, 87 home day care facilities, 22 public day care facilities, and 4 workplace day care facilities. The number of children who are registered in day care facilities in Dongdaemun-gu is 7,239, comprising 3.80% of the total registered children in Seoul city(190,310). Among children who are registered in day care facilities, the majority are registered in private day care facilities followed by home day care facilities, public day care facilities, and workplace day care facilities.

Table 11. Number of Day Care Facilities

		(Unit: facility)	
	Dongdaemun-gu(D)	Seoul city(S)	% (D/S*100)
Total	213	5,600	3.80
Public	22	618	3.56
Corporation	-	32	0
Private	100	2,551	3.92
Individual	96	2,324	4.13
Organization	4	227	1.76
Parents cooperation	-	17	0
Workplace	4	91	4.40
Home	87	2,291	3.80

Data: 2008 Seoul Statistical Yearbook.

Table 12. Number of Children

		(Unit: person)	
	Dongdaemun-gu(D)	Seoul city(S)	% (D/S*100)
Total	7,239	190,310	3.80
Public	1,778	48,177	3.69
Corporation	-	2,001	0
Private	4,092	104,661	3.91
Individual	3,804	95,067	4.00
Organization	288	9,594	3.00
Parents cooperation	-	432	0
Workplace	99	4,511	2.19
Home	1,270	30,528	4.16

Data: 2008 Seoul Statistical Yearbook.

2) Convenient Facilities for Disabled Population

There are 11,337 convenient facilities for the disabled population in Dongdaemun-gu, and these constitute 2.57% of the total convenient facilities for the disabled in Seoul city. The installation rate of convenient facilities for the disabled in Dongdaemun-gu is 89.40%, and this is a bit higher than that of Seoul city(83.46%). The installation rates of all types of facilities in Dongdaemun-gu were higher than that of Seoul city except for other facilities.

Table 13. Number of Convenient Facilities for Disabled

(Unit: facility)

		Dongdaemun-gu(D)	Seoul city(S)	% (D/S*100)
Total	Subject	12,681	527,801	2.40
	Installation	11,337	440,513	2.57
	Rate(%)	89.40	83.46	
Intermediate facility	Subject	4,372	194,589	2.25
	Installation	4,074	162,244	2.51
	Rate(%)	93.18	83.38	
Inside facility	Subject	5,681	239,135	2.38
	Installation	5,327	212,541	2.51
	Rate(%)	93.77	88.88	
Sanitation facility	Subject	2,262	81,206	2.79
	Installation	1,665	56,362	2.95
	Rate(%)	73.61	69.41	
Guidance facility	Subject	180	5,506	3.27
	Installation	117	3,219	3.63
	Rate(%)	65.00	58.46	
Other facility	Subject	186	7,365	2.53
	Installation	154	6,147	2.51
	Rate(%)	82.80	83.46	

Data: 2008 Seoul Statistical Yearbook.

3) Women's Welfare Facilities

Dongdaemun-gu has 3 welfare facilities for women(2 facilities for victims of prostitution and 1 facility for victims of family violence), and this constitutes 6.12% of all women's welfare facilities in Seoul city. There are 25 women registered in these 3 facilities is 25, comprising 1.44% of total women who are registered in women's welfare facilities in Seoul city(1,733).

Table 14. Number of Women's Welfare Facilities

(Unit: facility, person)

		Dongdaemun-gu(D) Seoul city시(S) % (D/S*100)		
Total	Facility	3	49	6.12
	Registered women	25	1,733	1.44
Facility for mother and child	Facility	-	6	0
	Registered women	-	306	0
Temporary facility for mother and child	Facility	-	2	0
	Registered women	-	69	0
Congregate housing for unmarried mother and child	Facility	-	3	0
	Registered women	-	47	0
Facility for unmarried mother and child	Facility	-	5	0
	Registered women	-	104	0
Facility for victims of prostitution	Facility	2	16	12.50
	Registered women	15	187	8.02
Facility for victims of family violence	Facility	1	13	7.69
	Registered women	10	200	5.00
Facility for victims of sexual violence	Facility	-	2	0
	Registered women	-	20	0
Facility for female tramps	Facility	-	2	0
	Registered women	-	800	0

Data: 2008 Seoul Statistical Yearbook.

4) Basic Living Expenses

The number of people who receive basic living expenses is 8,487 in Dongdaemun-gu, and this constitutes 4.14% of total beneficiaries in Seoul city(205,059). These beneficiaries can be divided into general, exception, and facility beneficiaries, with general beneficiaries comprising the most part of receivers in Dongdaemun-gu.

Table 15. Number of People Who Are Receiving Basic Living Expenses

(Unit: House, facility, person)

		Dongdaemun-gu(D)	Seoul city(S)	% (D/S*100)
Total beneficiaries	House	5,361	115,407	4.65
	Facility	7	157	4.46
	Population	8,487	205,059	4.14
General beneficiaries	House	5,255	112,113	4.69
	Population	8,194	188,311	4.35
Exception beneficiaries	House	106	3,294	3.22
	Population	141	4,940	2.85
Facility beneficiaries	Facility	7	157	4.46
	Population	152	11,808	1.29

Data: 2008 Seoul Statistical Yearbook.

5) Elderly Welfare Facilities

There is only one elderly welfare facility in Dongdaemun-gu, and 38 seniors registered in this facility. There are no free institutions nor long-term care facilities for seniors in Dongdaemun-gu. In contrast, there are 127 elderly recreation welfare facilities in Dongdaemun-gu, and these facilities constitute 3.81% of all the elderly recreation welfare facilities in Seoul city(3,335).

Table 16. Number of Elderly Welfare Facilities

		(Unit: facility, person)		
		Dongdaemun-gu(D)	Seoul city(S)	% (D/S*100)
Total	Facility	1	54	1.85
	Registered	38	3,256	1.17
Free institutions for aged	Facility	-	11	0
	Registered	-	331	0
Free long-term care facilities	Facility	-	28	0
	Registered	-	2,045	0
Charging facilities	Facility	1	15	6.67
	Registered	38	880	4.32

Data: 2008 Seoul Statistical Yearbook.

Table 17. Number of Elderly Recreational Facilities

		(Unit: facility, person)		
		Dongdaemun-gu(D)	Seoul city(S)	% (D/S*100)
Total facilities		127	3,335	3.81
Elderly welfare center	Facilities	1	29	3.45
	Worker	29	752	3.86
Senior citizen center		116	3,004	3.86
Elderly class		10	302	3.31
Elderly recreation facility		-	-	-

Data: 2008 Seoul Statistical Yearbook.

5. Health Behavior Index

1) Smoking

Among Dongdaemun-gu's current smokers, 26.5% have smoked more than 5 packs(100 pieces) during the past, and this rate is a little higher than that of Seoul city(24.2%). According to gender, the smoking rate among men in Dongdaemun-gu(49.8%) is higher than Seoul city(45.6%), whereas the smoking rate among women in Dongdaemun-gu(3.1%) is slightly lower than Seoul city(3.7%).

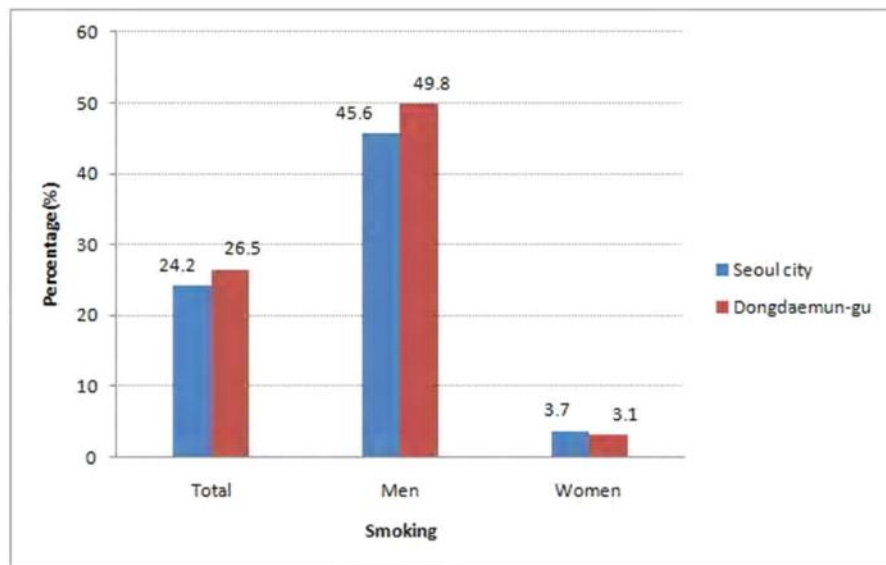


Figure 18. Smoking Rate

Data: 2008 Community Health Survey.

2) Alcohol

The proportion of people who drank alcohol more than once a month during the past year(these people are considered as drinkers) in Dongdaemun-gu is 59.9%, and this is a little higher than Seoul city(57.6%). According to gender, the drinking rate in Dongdaemun-gu is higher than Seoul city in both genders. Meanwhile, the drinking rate of men is much higher than women in both Dongdaemun-gu and Seoul city. Among these drinkers, the proportion of people who experienced high risk drinking more than once a month in Dongdaemun-gu is 38.7%, and this is much lower than that of Seoul city(46.4%).

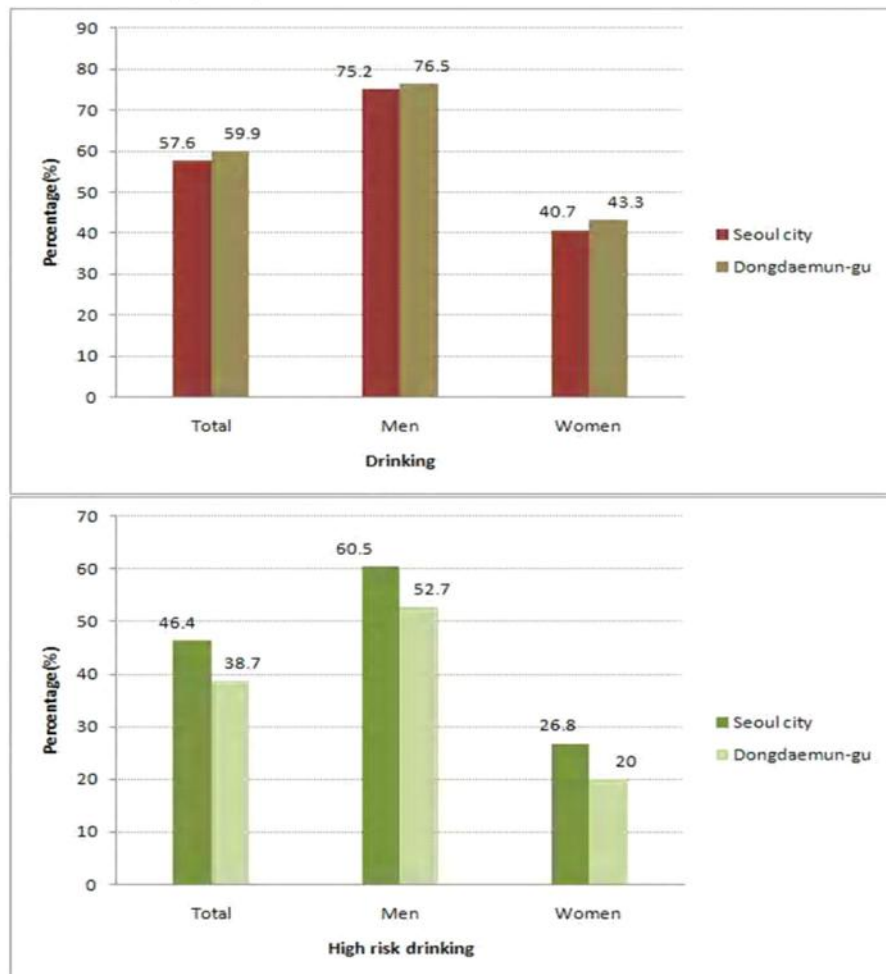


Figure 19. Rates of Drinking and High Risk Drinking

Data: 2008 Community Health Survey.

3) Nutrition Intake

People in Dongdaemun-gu consume more vegetables and fruits than Seoul city. Men consume less vegetables and fruits than women in both Dongdaemun-gu and Seoul city. The frequency of vegetable intake in Dongdaemun-gu is about 3 times more than Seoul city.

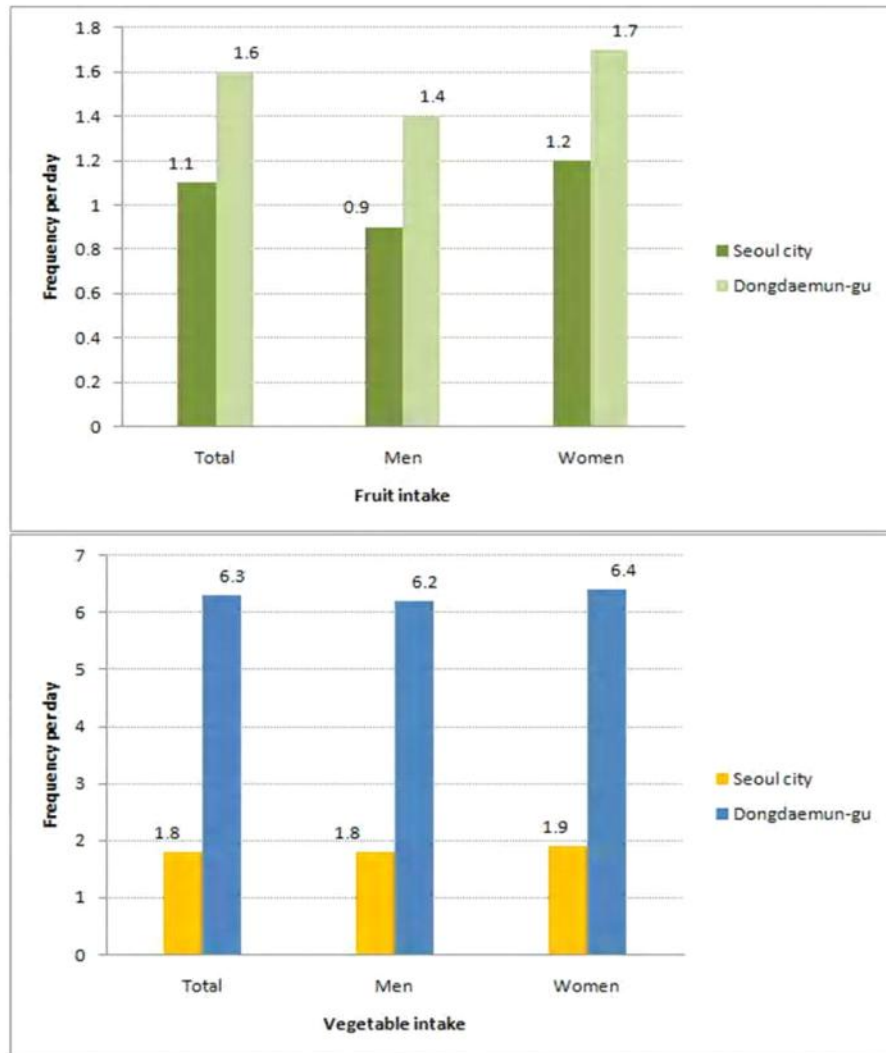


Figure 20. Frequency of Fruit and Vegetable Intake per Day

Data: 2008 Community Health Survey.

4) Brushing Teeth Right After Lunch

The proportion of people who brush their teeth right after lunch in Dongdaemun-gu is 46.5%, and this is a little lower than that of Seoul city(50.5%). Women are more likely to brush their teeth right after lunch compared to men.

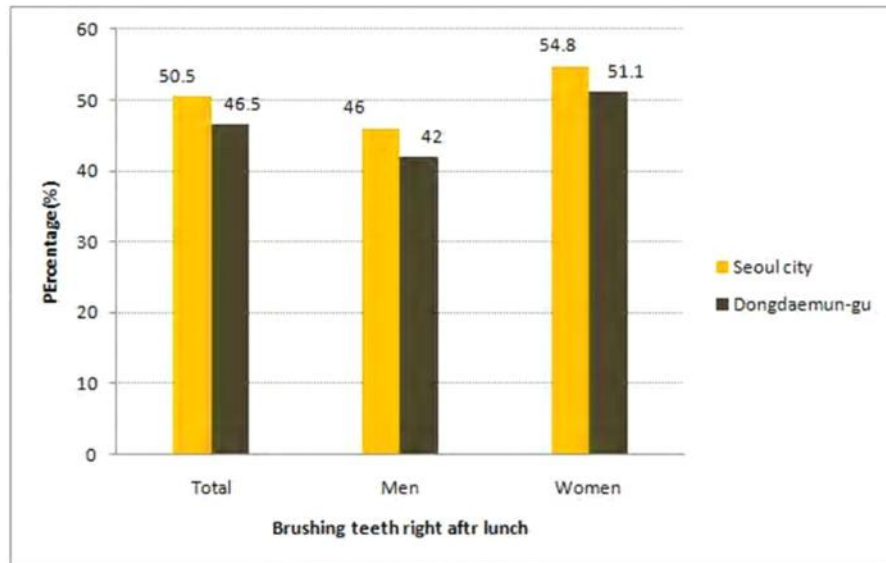


Figure 21. Rates of Brushing Teeth Right after Lunch

Data: 2008 Community Health Survey.

5) Moderate Physical Activity and Walking

The proportion of people who perform moderate physical activity more than 30 minutes a day, 5 days a week in Dongdaemun-gu is 6.7%, which is much lower than Seoul city(8.4%). According to gender, the proportion of men who perform moderate physical activity in Dongdaemun-gu(6.0%) is much lower than that of Seoul city(10.1%), whereas the proportion of women who perform moderate physical activity in Dongdaemun-gu is little higher than that of Seoul city. In Seoul city, men performed more moderate physical activity than women, whereas women performed more moderate physical activity compared to men in Dongdaemun-gu. The proportion of people who walked more than 30 minutes a day, 5 days a week in Dongdaemun-gu is 67.7%, and this is higher than Seoul city(57.5%). In both Seoul city and Dongdaemun-gu, men walked more than women.

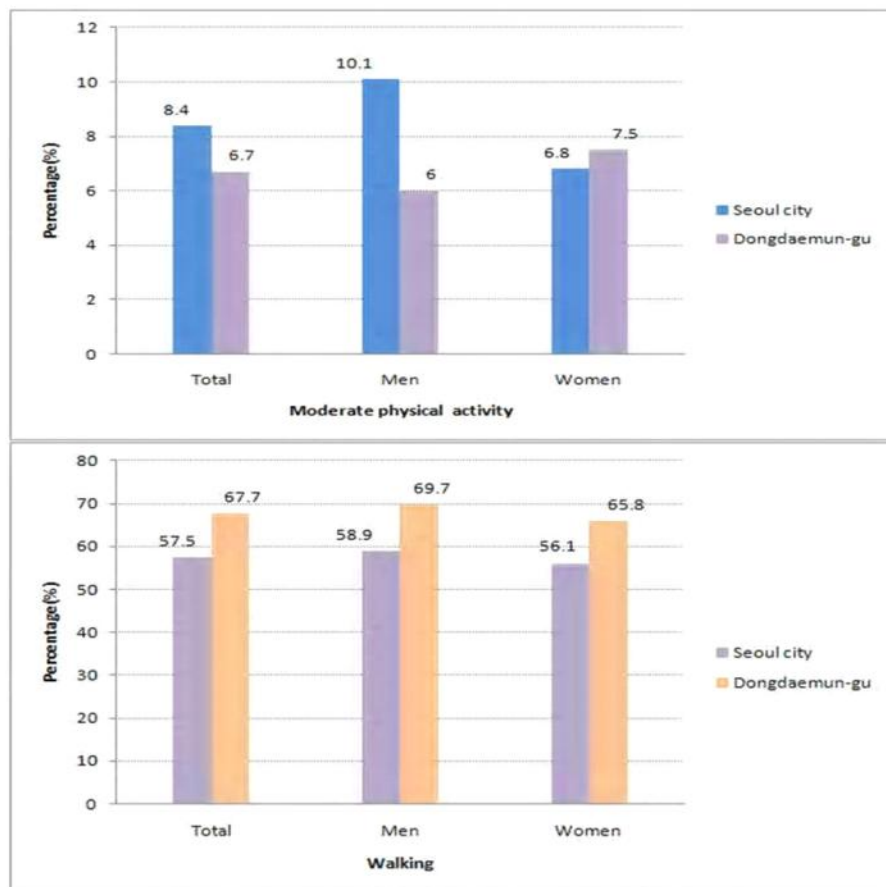


Figure 22. Rates of Moderate Physical Activity and Walking

Data: 2008 Community Health Survey.

6. Socioeconomic Index

1) Monthly Household Income

The proportion of people whose average monthly income is 3,000,000 won to 3,999,999 won in Dongdaemun-gu is 28.7%, and this constitutes the most part of people in Dongdaemun-gu. The total average monthly income of people in Seoul city is 3,241,000 won, whereas the total average monthly income of people in Dongdaemun-gu is 3,207,000 won.

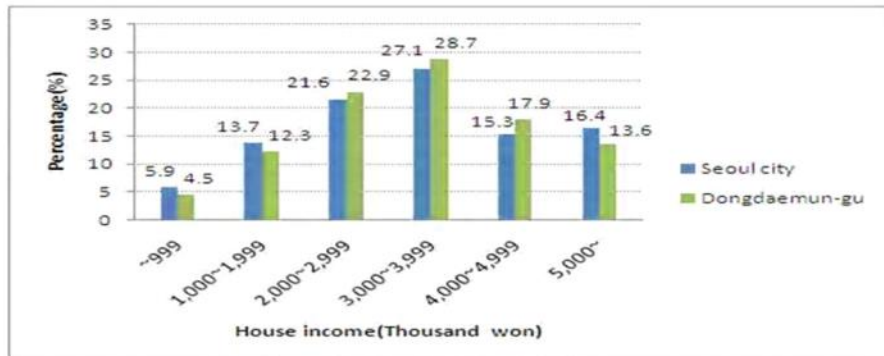


Figure 23. Monthly Household Income

Data: 2008 Seoul Statistical Yearbook.

2) Religion

Among total population in Dongdaemun-gu(371,024), the number of people who have their religion is 191,262, and this constitutes 51.5% of total population in Dongdaemun-gu.

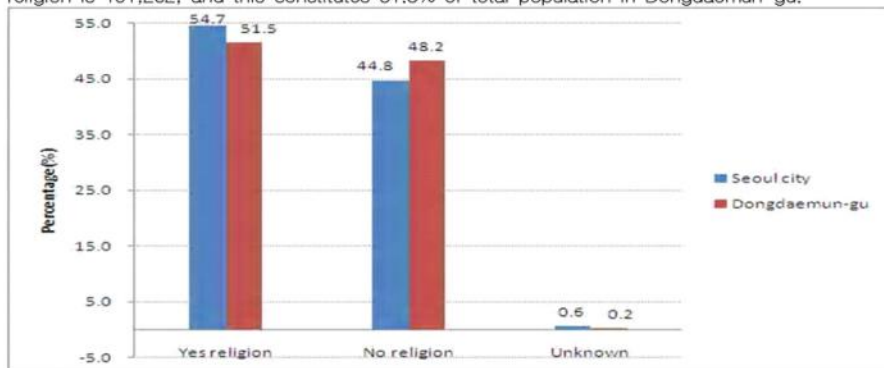


Figure 24. Rates of People Who Have a Religion

Data: 2005 Population Census.

3) Education

Among people who are aged 6 or more in Dongdaemun-gu, the proportion of people who are attending or graduated high school is 33.5%, and this constitutes the most part of people who are aged 6 or more in Dongdaemun-gu followed by college and elementary school. The proportion of people who did not attend any education in Dongdaemun-gu is 3.4%.

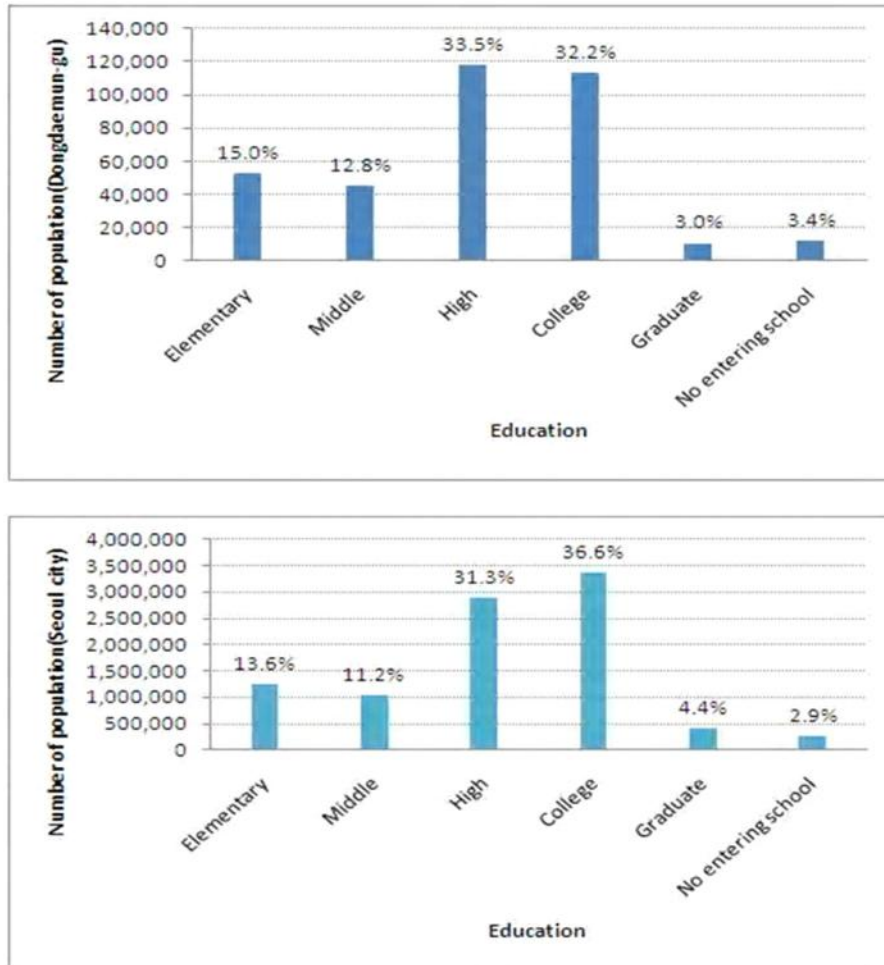


Figure 25. Population Distribution by Education

Data: 2005 Population Census.

8. Environment Index

1) Temperature and Precipitation

The monthly average temperature in Dongdaemun-gu is the highest in August(25.3℃), and is the lowest in January(-1.7℃). The annual average precipitation in Dongdaemun-gu is 1,356.3mm. The summer rainy season constitutes 39.14% of total precipitation in Dongdaemun-gu, whereas precipitation of winter season constitutes only 3.21% of total precipitation in Dongdaemun-gu.

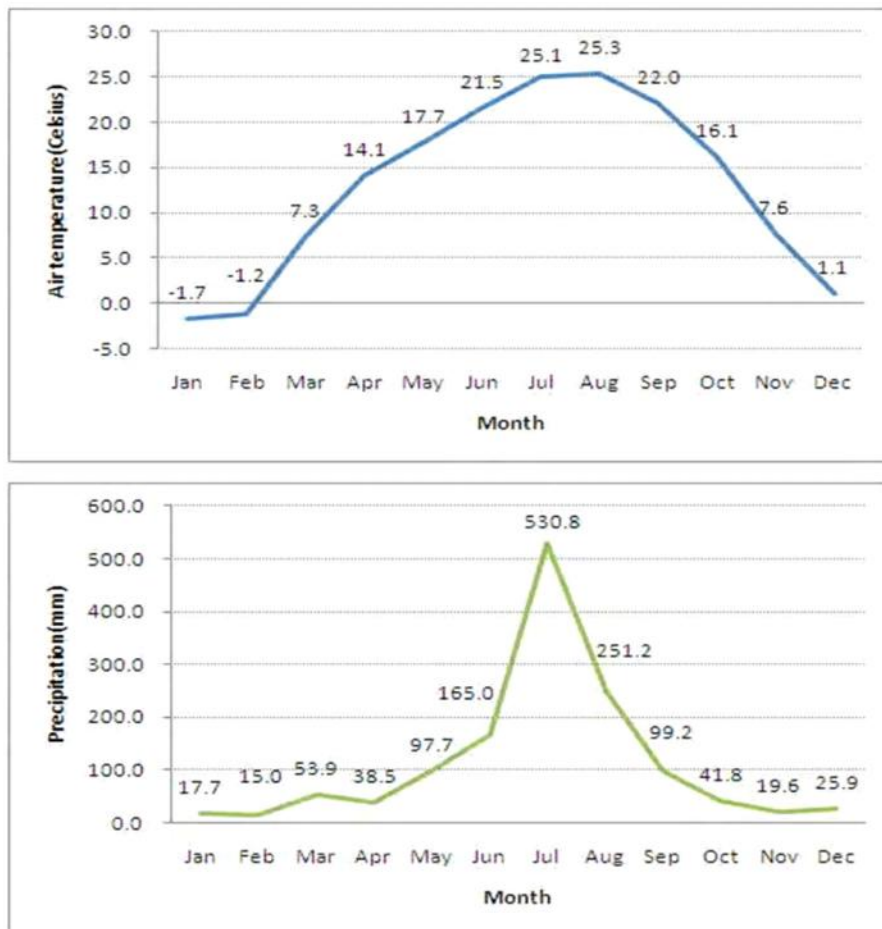


Figure 26. Average Temperature and Precipitation by Month

Data: 2008 Dongdaemun-gu Statistical Yearbook.

2) Air Pollution

The air pollution level of Dongdaemun-gu not only fits WHO air pollution criteria but also fits Korean air pollution criteria. Compared to Seoul city, Dongdaemun-gu has higher level of SO₂, O₃, and NO₂.

Table 18. Air Pollution Level

	SO ₂	PM-10	O ₃	NO ₂	CO
Korean criteria	0.02 ppm/year	70 μg/m ³ /year	0.06 ppm/8hours	0.05 ppm/year	9 ppm/8hours
WHO criteria	0.019	—	0.06	0.021	9
Seoul city (2008)	0.006	55	0.019	0.038	0.6
Dongdaemun-gu ¹ (2008)	0.008	49	0.02	0.04	0.6

Data: 2008 Seoul Statistical Yearbook.

3) Wastes

The annual waste production in Dongdaemun-gu is 1,850.3 tons, which constitutes 4.2% of the total annual waste production in Seoul city(44,203.6 tons). Dongdaemun-gu recycles 89.33% of its total waste, and uses landfills for 10.57% of its total waste.



Figure 27. Rates of Waste Managements by Method

Data: 2007 Seoul Statistical Yearbook.

4) Land Use

Dongdaemun-gu spans 14.20km², comprising 2.35% of the total area of Seoul city. Fifty-five point three percents of Dongdaemun-gu is made up of building sites, 18.2% of roads, 8.5% of school, 7.2% of forest, 3.5% of river, 3.0% of railroad, 0.9% of embankment, and 0.9% of park.

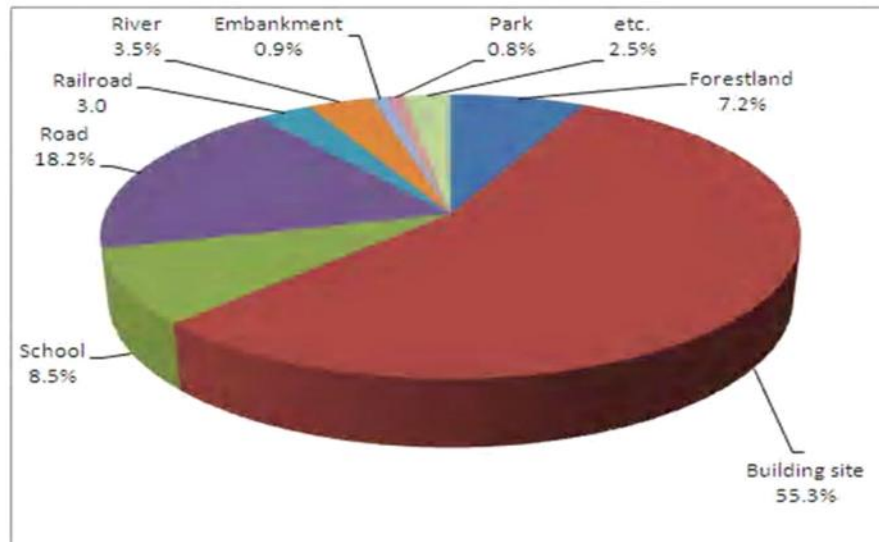


Figure 28. Percentages of Land Use

Data: 2009 Seoul Statistical Yearbook.

9. Other Index

1) Happiness Index

The total average happiness index in Dongdaemun-gu is 6.48(out of 10), and this is a bit lower than that of Seoul city. All indicators of the happiness index, except for health status and financial status, in Dongdaemun-gu were lower than Seoul city's. Dongdaemun-gu showed the highest points in health status(7.04 points) and the lowest points in financial status(5.89 points).

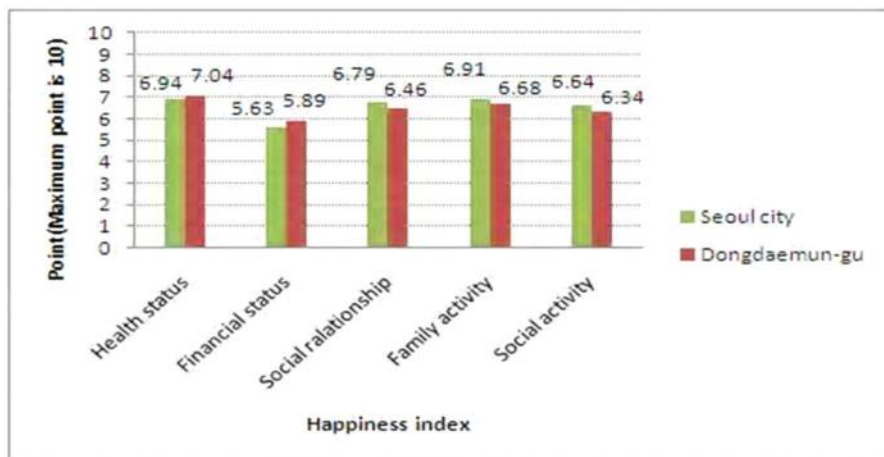


Figure 29. Happiness Index

Data: 2008 Seoul Statistical Yearbook.