

Assessment

(Extracted from the Master Plan)

Towards Healthy 100: Gangbuk Master Plan

“Healthy 100, Hopeful Gangbuk!”



2018



Gangbuk-gu

2

Evaluation of Gangbuk's Age-Friendliness

2.1 Local Status of Gangbuk District

2.1.1 General Status

- Administrative Area Status

- The area of Gangbuk district is 23.61km² which amounts to 3.9% of Seoul Metropolitan City (605.52km²). Currently, 141,165 households and 329,042 people inhabit in Gangbuk district's administrative units consist of 13 gu, 384 tong, 3,333 ban (2.29 population per household).
- Its financial self-reliance rate is 18.8% which ranks 24th among 25 districts, and financial independence rate is 47.1% which ranks 22nd.

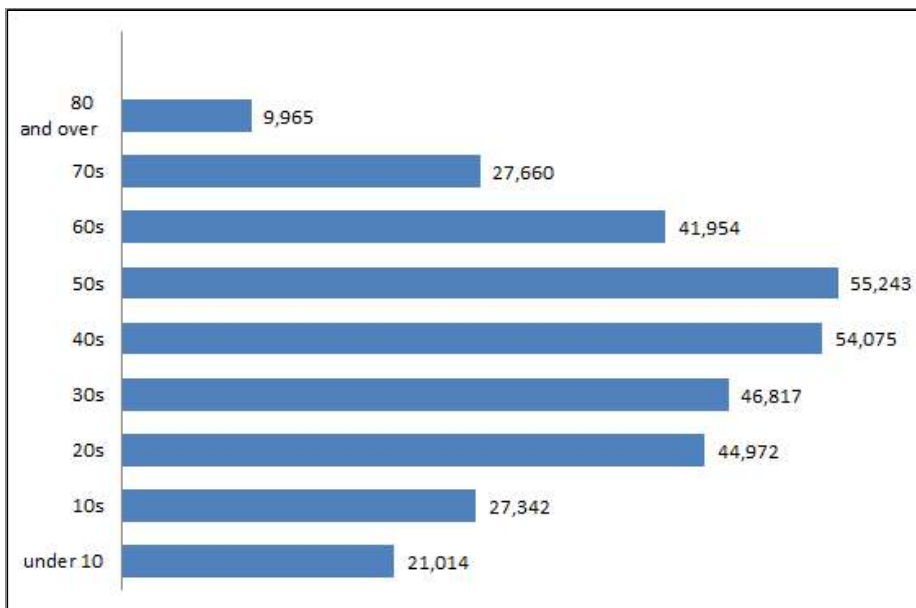
- Population Status

- On October 2017, among Gangbuk's 329,042 populations elderly population over 65 years old are 56,078 (female 56.9%, male 43%) which amounts to 4.1% of Seoul's

elderly population. Among 25 districts, it has one of the highest old-age population ratio (17.0%) that its role of AFC is especially called for.

- Seeing our population by age group, the 50s are most common accounting for 16.8% (55,243 people), then the 40s 16.4% (54,075 people), followed by the 30s 14.2% (46,817 people). Based on these numbers, it is easily expected that the entry rate of its elderly population will be swift, which calls for sound elderly welfare policies and AFC environment.

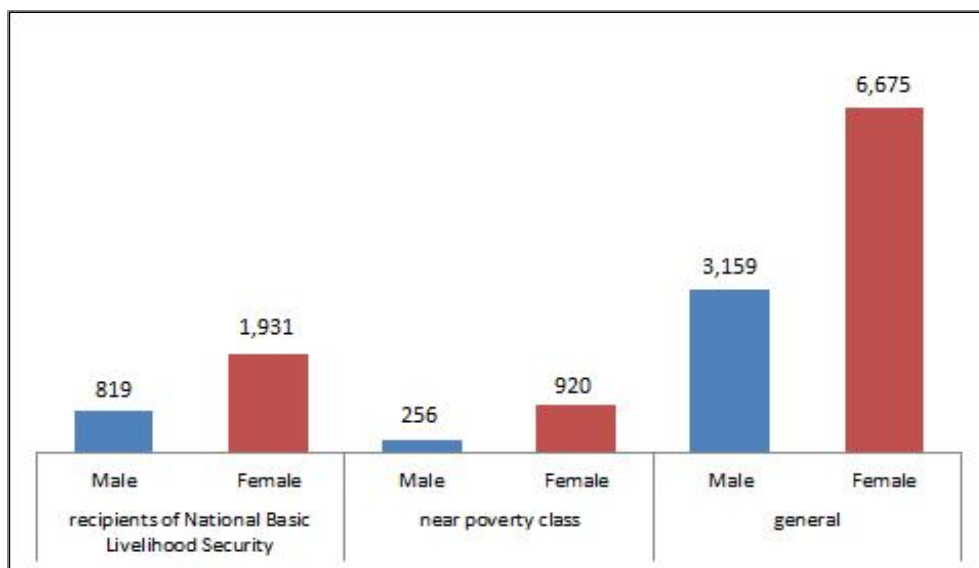
(unit: person, 2017. 9.)



○ Status of the Elderly living Alone

- As of the end of 2016, there were 13,760 elderly living alone in Gangbuk, which was as large as 24.5% of the elderly population 65 or older (52,309). Among the elderly living alone (Single Elderly), the portion of female Single Elderly (9,526 / 69.2%) was significantly greater than that of male (4,234 / 30.%).
- 28.5% (3,926) of the Single Elderly were in the low-income bracket. 20% (2,750) were the eligible recipient of national basic living security and 8.5% (1,176) were in the second-lowest income bracket. It was found that the female Single Elderly were exposed to poverty in a greater degree - the rate of female, low-income Single Elderly was 72.6% of all low-income Single Elderly.

(unit: person, 2016.)



2.1.2 Ageing Trend

○ Average Age, Birth Rate and Mortality Rate

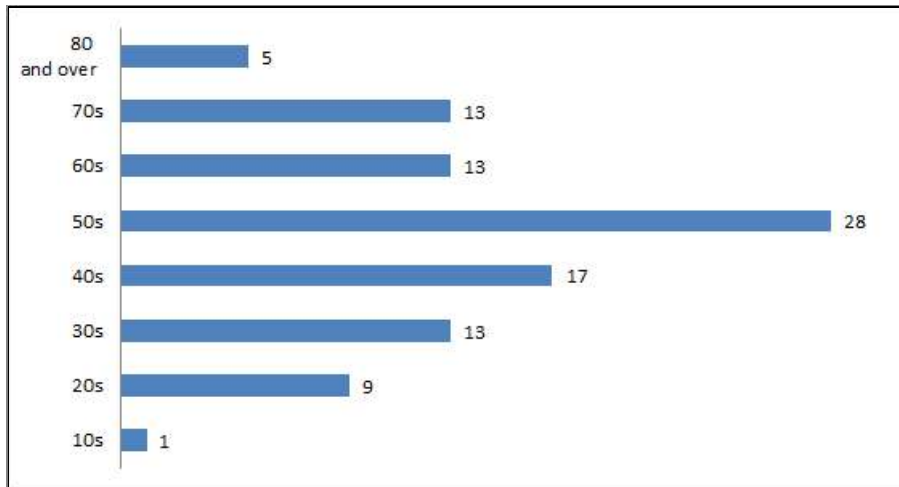
- On September 2017, the average age for Gangbuk population is 43.9 years old (41.5 for Seoul), i.e., 2nd highest in Seoul following Jung district (44.1).
- Its birth rate is 6.1% (7.7% for Seoul), i.e., 2nd lowest following Jongno (5.7%) among 25 districts of Seoul, and its mortality rate is the highest at 5.7% (4.4% for Seoul).

○ Suicide Rate

- Gangbuk has the highest rate of suicide in Seoul - 30.6 persons per 100,000 (45.3 male and 16.4 female). In 2016 alone, 99 Gangbuk residents committed suicide, and 31.3% of them (31 persons) were the elderly 60 or older. In terms of the gender, the suicide rate of male elderly (23 persons, 74.2%) was significantly higher than that of the female (8 persons, 25.8%).
- The poor elderly has become a well-known problem. 77.4% (24 persons) of the elderly who committed suicide were unemployed. The suicide rate of those in their 50s, those who are about to reach their retirement ages, reached 28.3% (28 persons). Such high suicide rates have alerted

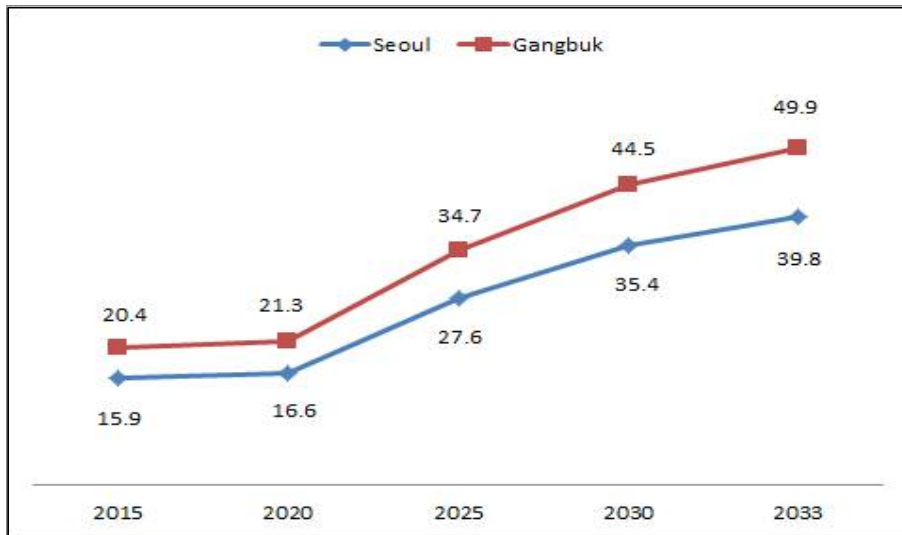
the adults to prepare for their post-retirement life.

(unit: person, 2016)



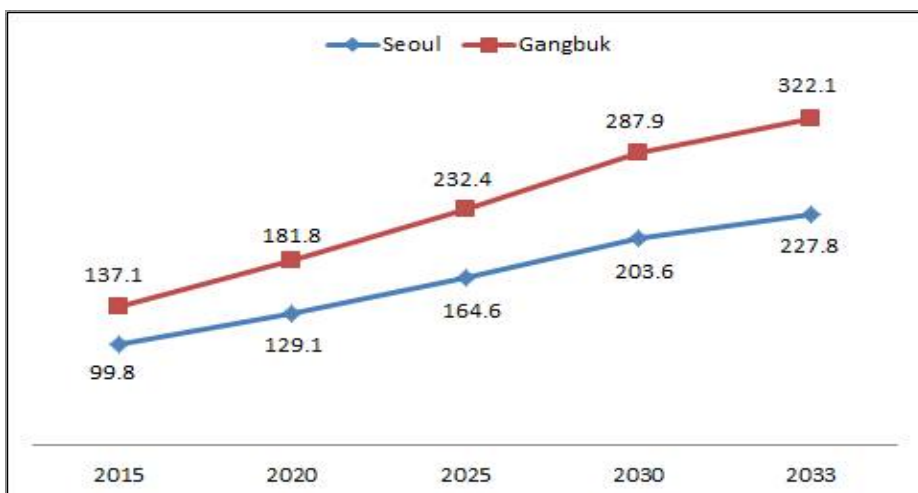
- Old Dependency Ratio (ODR) and Aged-Child Ratio (ACR)
 - On September 2017, Gangbuk's ODR is 23.3% and its ACR is 173.2 (118.0 for Seoul).
 - On February 2016, Seoul announced its future population estimation by the districts. According to the statistics, Gangbuk's ODR is expected to be on the rise to 49.9% by the year 2033 from 20.4% on 2015. That ranks for the highest among the 25 districts of Seoul (expected ODR for Seoul is 39.8%).

(unit: %, year)



- Gangbuk's ACR is also expected to be steadily on the rise. ACR is estimated to be 322.2 by the year 2033 from 131.7 on 2015. Among 25 districts of Seoul, it has ranked to be the 2nd highest following Jung-gu (expected ACR for Seoul is 227.8).

(unit: %, year)

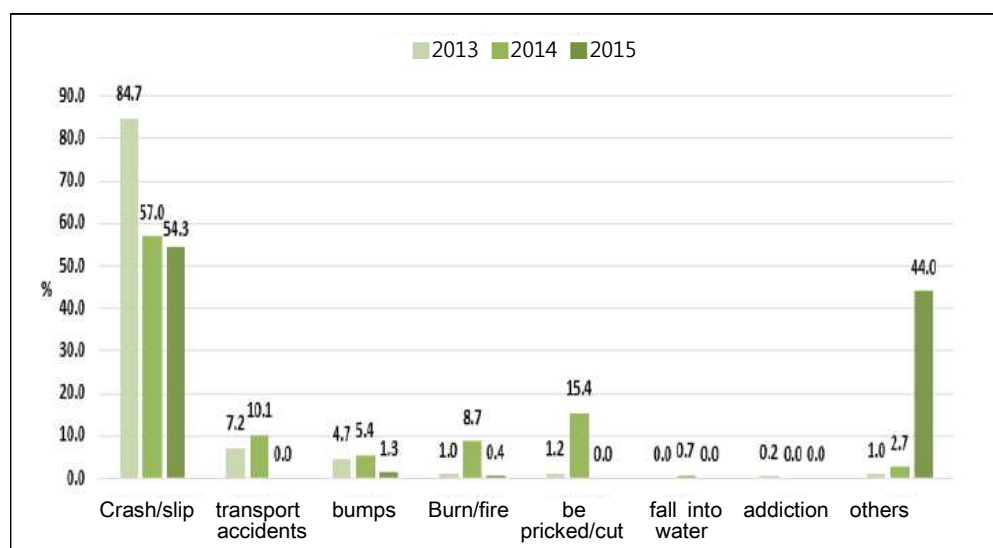


2.2 Results of 2016 Injury Status Survey

- Gangbuk has been steadily trying to raise the residents' awareness on safety and to reduce the damages from accidents since 2008 (when it started the Safe City Project) and it was certified as the WHO International Safe Community in 2012.
- As a part of such efforts, Gangbuk has published the *2016 Injury Status Survey Report* in 2016, which described the damages suffered by the residents of Gangbuk-gu, such as death, injury and accidents. This Report which contains the related data from 2013 to 2015 reviews major strategies of Gangbuk on reducing the damages in the community, such as identifying the causes and environments that threaten the safety of residents and reviewing the status of damages suffered by and the risks that threaten the high-risk, vulnerable class (e.g. infants, children and elderly).
- In this section, we will introduce the issues related to the awareness of safety by the elderly 65 or older. Also we will show the recent data concerning suicide committed by older adults living in Gangbuk district.

2.2.1 Causes of Injuries to the Elderly

- One of the major causes of injury for the elderly residing in Gangbuk district was falling. The review of recent three years' data from the Gangbuk Elderly Damage Monitoring System revealed that the injury by slip and/or fall was the biggest cause in every year. The second biggest reason was traffic accident in 2013, puncture or laceration in 2014 and collision (excluding others) in 2015.

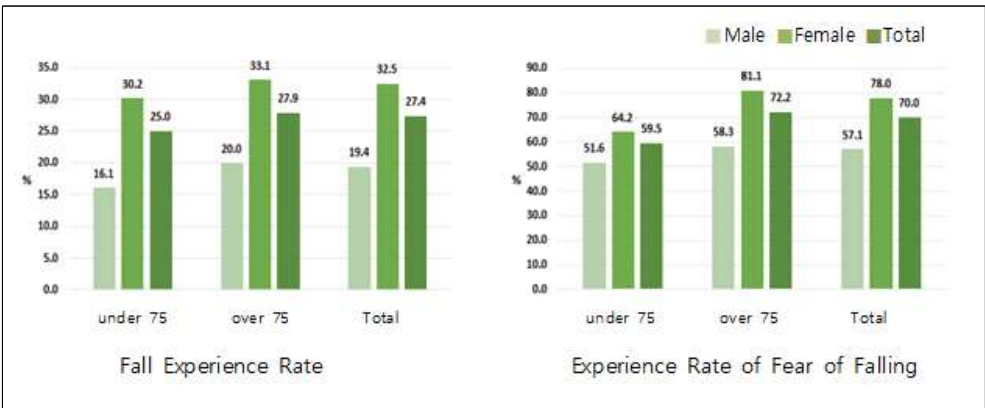


- In terms of causes of damages per type of location, the slip and/or fall were the biggest cause in all locations (including homes) in 2015. In 2014, the slip and/or fall; the traffic accidents; puncture or laceration; and burn by fire were the biggest causes, respectively, in homes, group facilities and

in/outdoor cultural facilities; roads; work places; and commercial service areas. This shows that the environment improvement projects aimed at protecting the elderly from falling injury must be implemented not only in their homes, but also in all places they frequent, such as the group or cultural facilities and in the line of their movement.

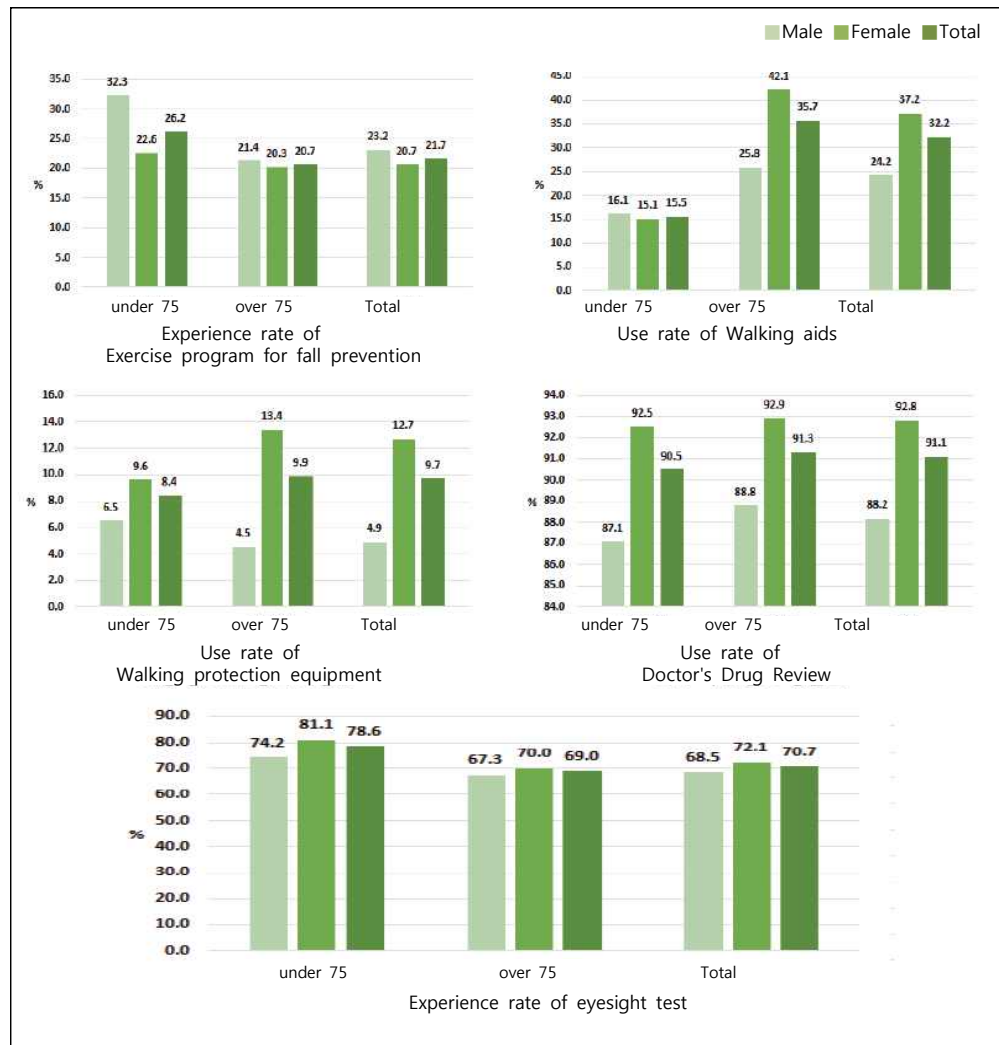
2.2.2 Awareness on Safety

- In terms of the elderly’s awareness on safety, it was found that the elderly in Gangbuk district were most concerned with (in order) the slip and/or fall, the traffic accidents and the accidents caused by gas and/or electricity. 27.4% of respondents said that they had suffered from falling, and 70% said that they had incidents where they could have suffered from falling. As far as the elderly were aware, their surroundings were not as safe as they expected them to be.



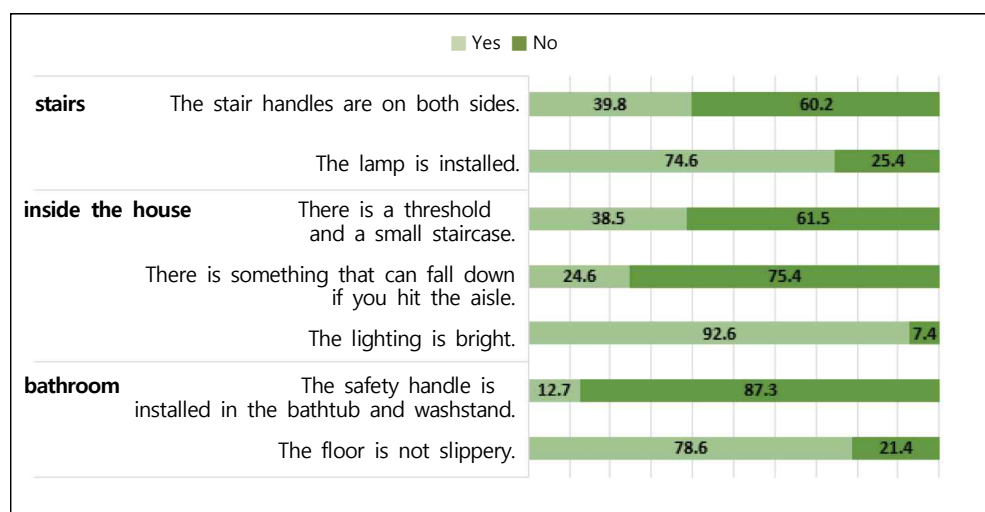
- Meanwhile, the rate of participation in safety training programs by the elderly was low. The rates of: participation in falling injury prevention exercise program was 21.7%; use of ambulation support equipment was 32.2%; and use of ambulation protection equipment was 9.7% - the elderly were not interested in taking preventative action which require their own efforts.
- More female elderly experienced falling, feared for falling, used ambulation protection equipment, considered taking the prescribed medicine and received vision examination; and more male elderly regularly participated in falling injury prevention exercise programs.
- The rates of the elderly experiencing falling, fearing for falling, using ambulation protection equipment and considering taking prescribed medicine were greater in those 75 or older; and the rates of the elderly who received vision examination and regularly participated in falling injury prevention exercise program were greater in those younger than 75.
- When considered both gender and age, the female elderly 75 or older had high rates of experiencing falling or fear of falling, while their rate of regularly participating in falling injury prevention exercise program was the lowest.

- Meanwhile, 91.1% of the elderly considered taking the prescribed medicine and 70.7% received vision examination - this shows that the elderly were highly dependent on medical institutions.



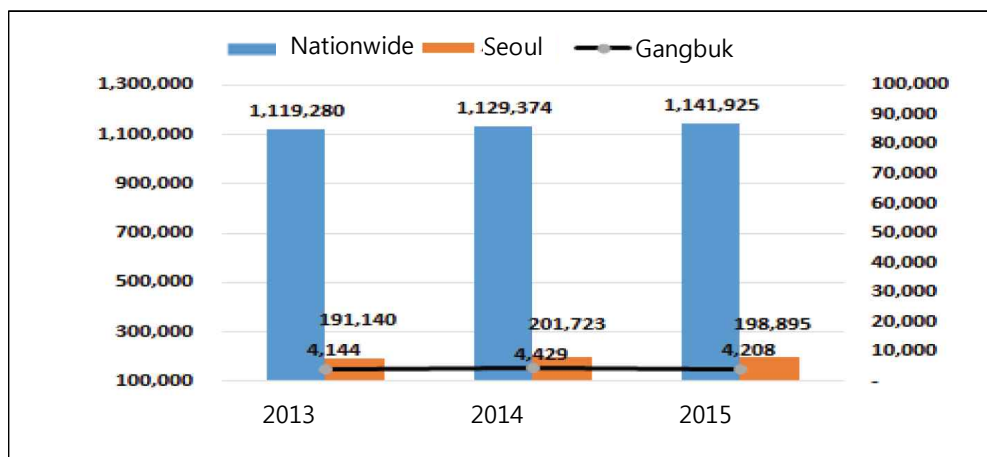
2.2.3 Safe Environment

- Then, in what living environment do the elderly live? When reviewed the falling injury cases occurred inside homes: the bathroom floor was slippery in 21.4% of cases; no safety rail was available in the bathtubs or wash basins in 87.3% of cases; and there were objects in the hallways that could cause one to trip over in 24.6% of cases. In 38.5% of cases, there were door sills or steps, no light was installed in the staircase (in 25.4% of cases) and the handrails in staircases were not on both sides of the walls (in 60.2% of cases). While it is necessary to improve the overall conditions of the elderly's living environment, it is especially important to improve the overall conditions of the Single Elderly and female low-income elderly whose numbers are greater than others.



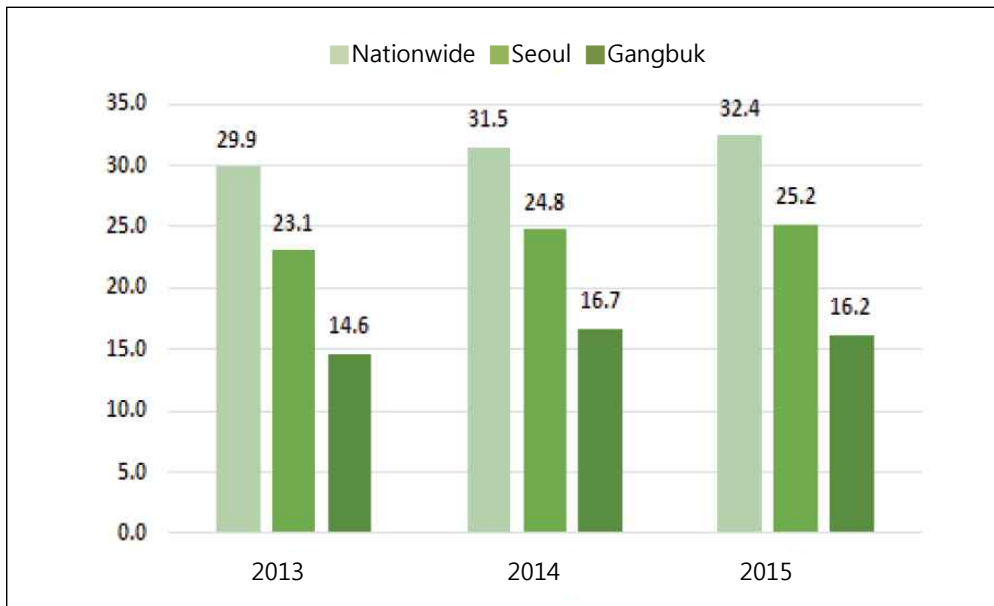
- The rate of the elderly in Gangbuk suffering from traffic accidents was lower than those of entire Korea or Seoul. While the number of traffic accidents involving the elderly steadily rose in Korea and in Seoul, that in Gangbuk rose from 473 cases in 2013 to 553 cases in 2014 and dropped to 543 in 2015.

(unit: Occurrence count)



- The rate of injury by traffic accidents rose from 14.6 in 2013 to 16.7 in 2014 and 16.2 in 2015. The annual rates of traffic accident in the past three years were lower than those of Korea and Seoul. In terms of type of traffic accidents, the most frequent type of accidents was car-to-car accidents, followed by car-to-person and by car-alone (in order).

(unit: person per thousand population)

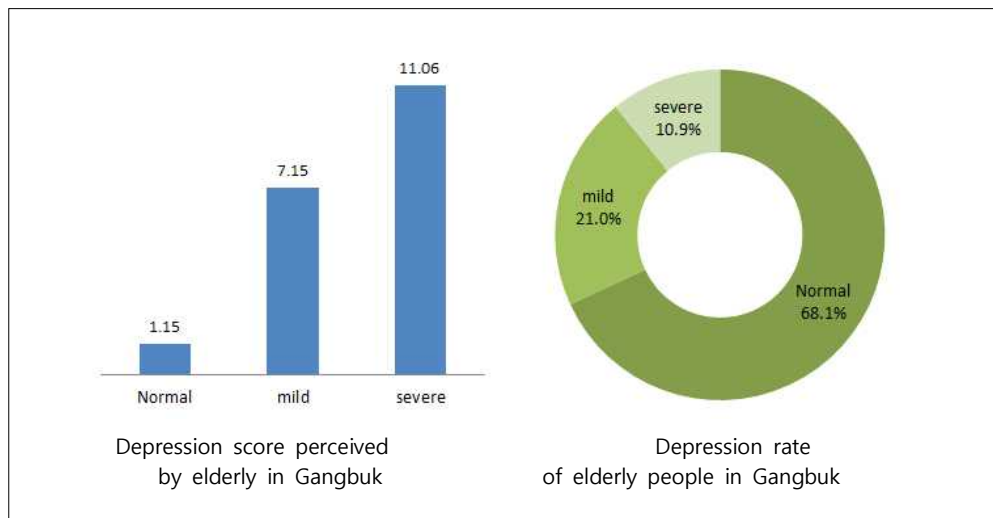


- 74.7% of the elderly 65 or older wore seat belts, 10.3% of them rode two-wheeled vehicles and 16.3% had ridden two-wheeled vehicles while they were drunk. 94.7% used road crossings and/or overpasses, 92.2% said they complied with road crossing signals, and 83.8% said they got off the buses after the buses completely stopped.
- Meanwhile, the rate of participation in safety training was very low, at 15.5%. 61.8% of the respondents answered that they were not interested in participating in any event related to safety, and 51.7% answered that the safety training would not be useful. The rate of wearing bright-colored cloths at night was also very low, at 6.5%. It is necessary to develop the

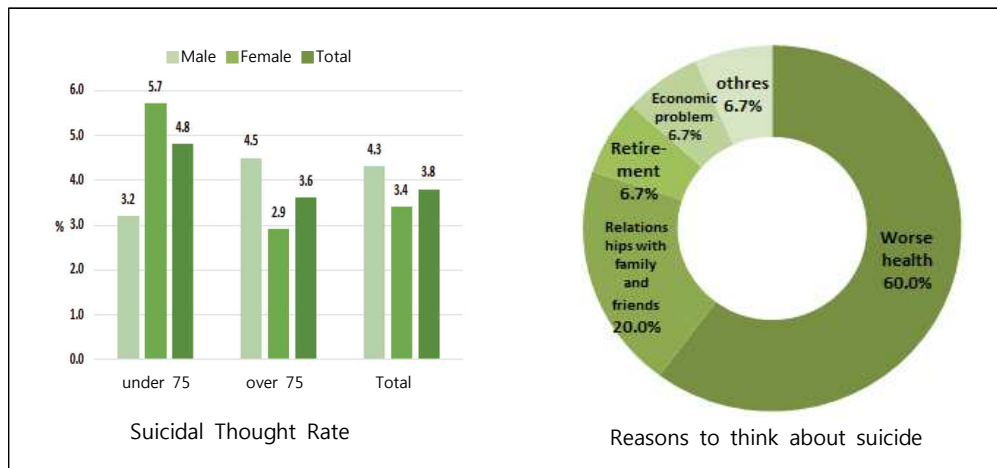
training programs focused on satisfying the specific needs of and inviting the elderly to participate.

2.2.4 Awareness on Suicide

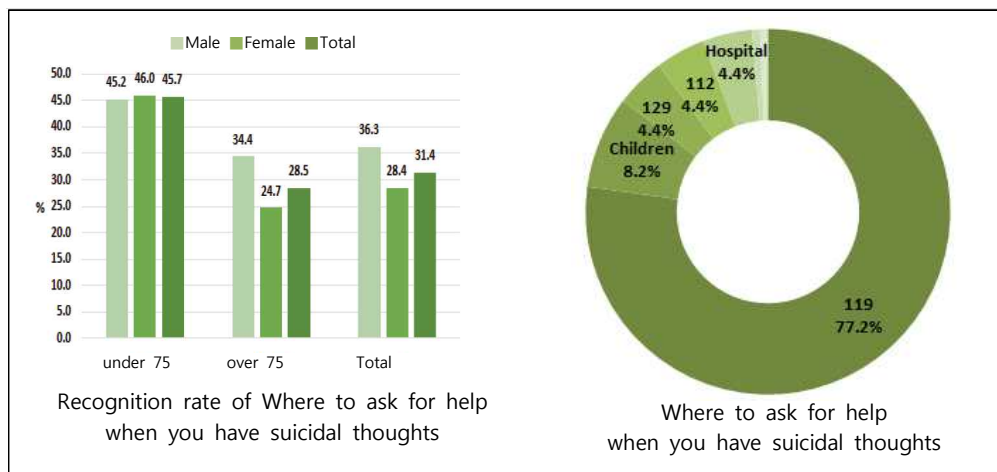
- The average depression score of the elderly living in Gangbuk-gu was 3.49. 68.1% (325 persons) were normal, 21.0% (100 persons) had light symptoms of depression and 10.9% (52 persons) had serious cases of depression.



- 3.8% and 0.8% of the elderly, respectively, thought about committing suicide and have ever prepared to commit suicide. Major reasons for doing so were: worsening health (60.0%) and relationship with family and friends (20.0%).



- The greater the degree of depression, the greater the rates of thinking about committing suicide and having prepared to do. The seriously depressed males and females, respectively, showed the highest rates of thinking about committing suicide and having prepared to do so, which attracted my attention.



- Only 31.4% said that they knew a place they could ask for help when thought about committing suicide. 77.2% of the respondents said '119 (Korea's public emergency call number)' was a place they would ask for help when they thought about committing suicide - the dependence on the local community, including families and neighbors, was significantly low.

Summary

- The biggest cause of injury for the elderly residing in Gangbuk-gu was falling. While it is necessary to improve the overall conditions of the elderly's living environment, including their homes and living, group activity and cultural facilities, it is especially important to improve the overall conditions of the Single Elderly and female low-income elderly.
- While improvement of the environment to prevent the elderly from getting injured by falling was found to be important, the rate of the elderly participating in falling injury prevention programs was very low. For example, the elderly heavily relied on the hospitals to get prescriptions for medicines and vision checks, but hardly ever participated in the activities aimed at preventing the falling injury which required their voluntary efforts during daily life. A review of training method and access to training seems necessary.
- The rate of the elderly who had ever participated in traffic safety training was also very low, at 15.5%. More than half of the elderly who participated in the survey said that they were not interested in participating in the safety training events and they didn't think such events would be helpful. Seen from the perspective of educational value, it is necessary to develop training programs which are

customized to the elderly and promote the elderly to participate.

- Meanwhile, only 31.4% knew where to ask for help when they thought about committing suicide. 77.2% of the respondents said '119' was a place they would ask for help when they thought about committing suicide - the dependence on the local community, including families and neighbors, was significantly low.

2.3 Results of 2017 Age-friendliness Survey

2.3.1 Survey Overview

- The *2017 Age-friendliness Survey* was conducted to evaluate living trends of elderly residing in Gangbuk, using the eight areas suggested by the WHO Guideline. We tried to understand how can we create a local environment which is friendly to the elderly, especially in the areas of health, comfortable living and local community.
- This Survey was conducted on 1,000 elderly 60 years or older residing in Gangbuk district in May, 2017. Contents of the questionnaire was listed as described in Table 2-3.

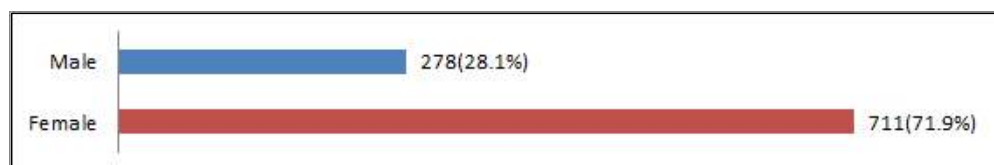
<Table 2-3> Contents of the 2017 Age-Friendliness Survey

Categories	Contents	Number of Questions
Status of Old Age Preparation	Health, old-age fund preparation, social activity participation, hobby or leisure activities, and job skill improvement preparation	5
Health Status	Subjective health status	1
Living Environment	Residential convenience: whether having experienced fall before, place of fall	2
	Transportation Convenience: whether public transportation is accessible within 10-minute radius, and main transportation means	2
Community Activities	Employment experience, employment disability, and whether participating leisure or cultural activities	3
Social Inclusion	Whether having experienced age discrimination, and subjective possibility of dying in solitude	2
General Characteristics	Age, gender, income, and income composition	4

2.3.2 General Characteristics

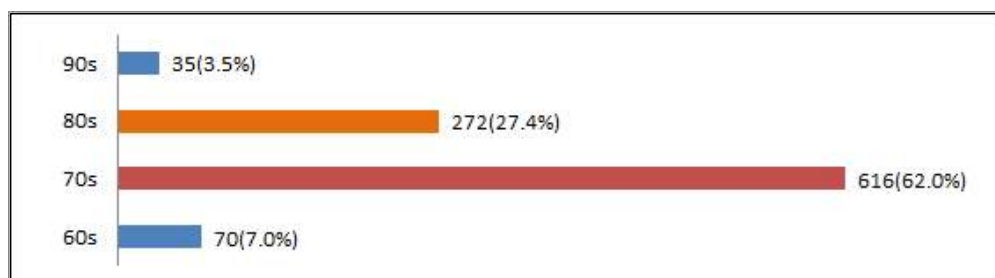
- Gender: Male 28.1%, Female 71.9%

(n=989, unit: person)



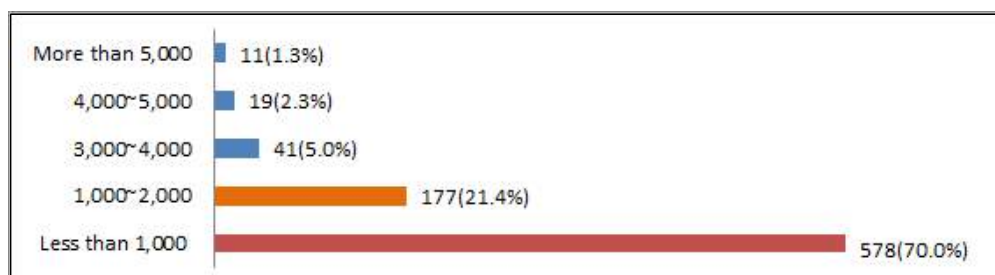
- Age: 77.1 in average (± 5.8 years old)

(n=993, unit: person)



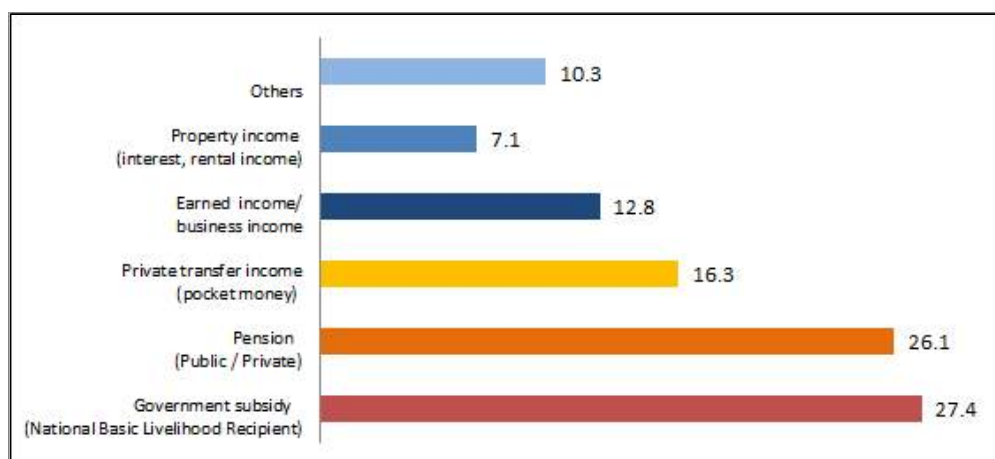
- Average Monthly Income (including incomes from spouse)

personal income after tax and social insurance payment (n=826, unit: 1,000won)



- Income Composition

(n=815, unit: %)



Summary

- The gender ratio was 28.1% for male and 71.9% for female; the average age was 77.1 years old that female elderly facing their 80s were relatively high. Referencing with the elderly population ratio of Ganbuk by the end of 2016 (male 43% and female 57%), this female participant rate is very high that we ought to consider this factor in its interpretations.
- While 70.0% of the subjects showed low income level below one million won per month, their wage (revenue generating through labor) portion of the whole income was low as well. The main sources of earnings were consist of government subsidy (27.4%), pension (26.1%), private transferred income (16.3%), property income (7.1%), and so forth that non-labor income portion was high (76.9%), whereas earned/business income portion remained just 12.8%.

2.3.3 Ageing Readiness

○ Ageing Readiness: 2.56 points

global score 4 (not prepared at all → fully prepared)

Ageing Readiness Status	Average	Average of Seoul	N
Total	2.56	2.3	767
Health maintenance in doing regular exercises and health check-ups	2.86	2.9	973
Participating social activities to maintain interpersonal relationship	2.74	2.4	938
Hobbies, and leisure activities	2.59	2.3	897
Old-age fund preparation	2.38	2.2	913
Preparing for job skill improvement	2.14	1.6	857

global score 4 (not prepared at all → fully prepared)

Ageing Readiness Status	Average	Gender Average	t
Health Maintenance in doing regular exercises and health check-ups	2.86	Female 2.90	1.262
		Male 2.81	
Participating social activities to maintain interpersonal relationship	2.74	Female 2.72	-.589
		Male 2.77	
Hobbies, and leisurely activities	2.59	Female 2.51	-3.295**
		Male 2.75	
Old-age fund preparation	2.38	Female 2.37	.748
		Male 2.32	
Preparing for job-skill improvement	2.14	Female 1.98	-5.627***
		Male 2.45	

* $p < .05$, ** $p < .01$ *** $p < .001$

Summary

- It appears that Gangbuk district's ageing readiness for the elderly over 60 years old was 2.56 out of 4 points, which is higher than Seoul City's average score (2.3 points).
- Ageing readiness question items in the order of from highest to lowest are health management (2.86 points), interpersonal relationship (2.74 points), hobbies and leisure (2.59 points), old-age funds (2.38 points), and job skill (2.14 points), which especially shows they scored higher than those of Seoul City.
- Among these hobbies and leisure and job skill items show clear gender differences. Whereas health management, interpersonal relationship, age-fund preparation question items show no significant gender differences, female scored 2.51 points and male 2.75 ($p < .01$) for hobbies and leisure item, and female scored 1.98 points and male 2.45 ($p < .001$) for preparation for job-skill improvement that on both question items male score higher than female surveyeys. We

need to find ways to support income generating and social activities for female elderly.

2.3.4 Health Status

- Subjective health status: average 3.22 point

global score 5 (poor → very healthy) (n=1,063)

	Average of Seoul	Average	Gender Average	
Subjective health status	3.2	3.22	Female	3.19
			Male	3.25

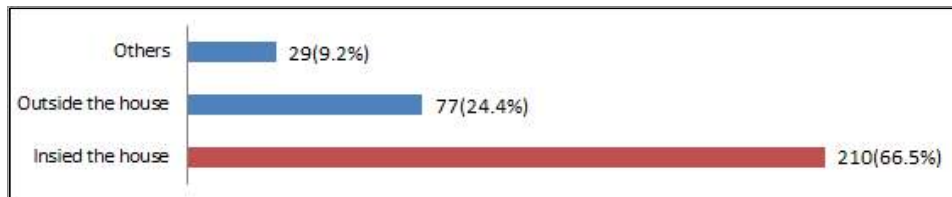
Summary

- The self health evaluations by Gangbuk district elders was 3.22 points out of 5 points, which is on similar level as Seoul City's average (3.2 points). Female average was 3.19 points and male 3.25, which female scored little bit higher but they are not significant difference level.

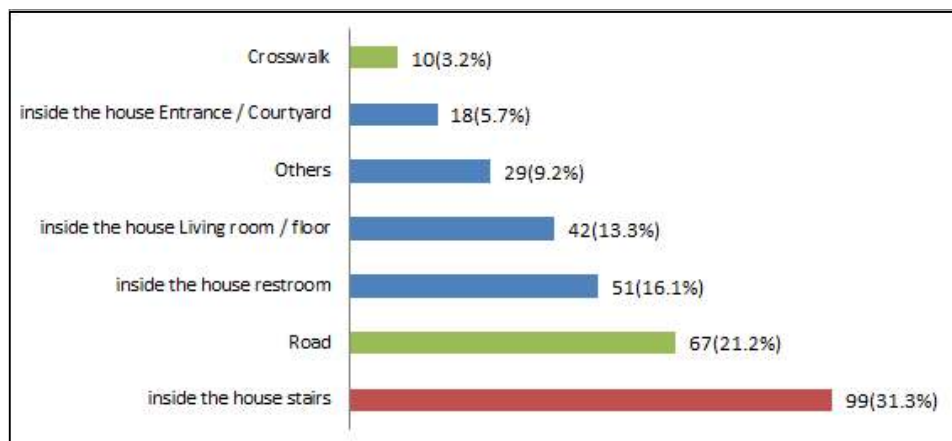
2.3.5 Living Environment

○ Residential Convenience: Fall and inconvenience factors

(n=316, unit: person)



(n=316, unit: person)



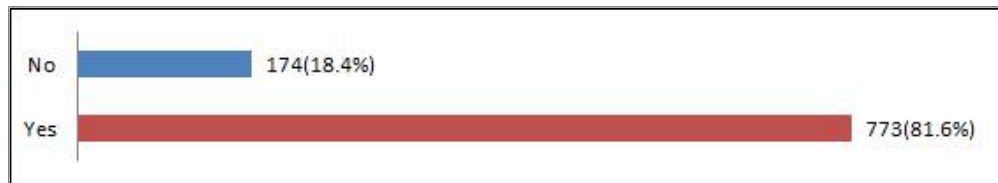
Summary

- Total 316 older adults (28.4%) experienced fall during last year.
- More frequent falls were reported Inside the house (66.5%) rather than outdoor environment (24.4%). According to the survey from Seoul, almost same proportion (52.5% inside the house, 52.2% outdoor environment) were reported. Tailored housing improvement program for Gangbuk residents are needed.

2.3.6 Transportation and Housing Environment

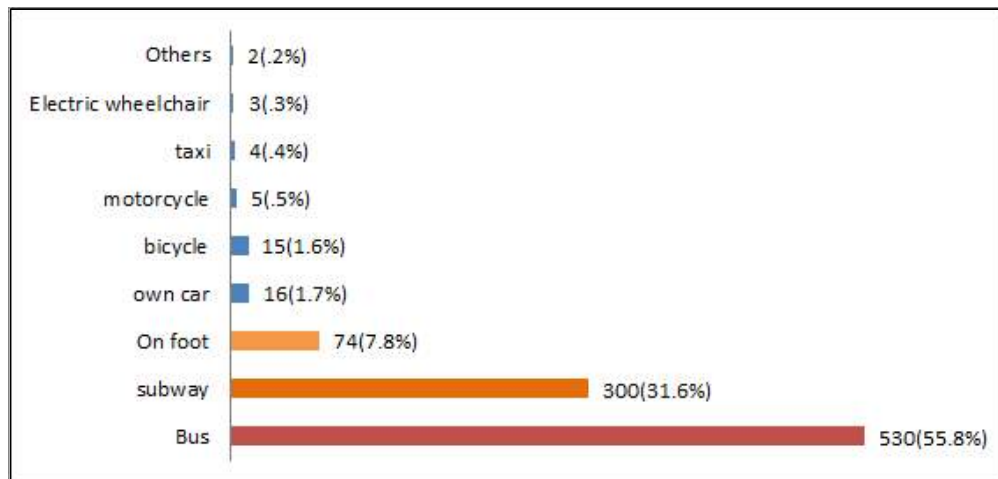
○ Accessible Public Transportation within 10 Minutes

(n=947, unit: person)



○ Main Transportation

(n=949, unit: person)



Summary

- We could evaluate Gangbuk district's transportation convenience is generally good. 81.6% of the whole subjects answered that they could access to public transportation within 10-minute radius from one's residential space (home); it shows that among them 87.4%

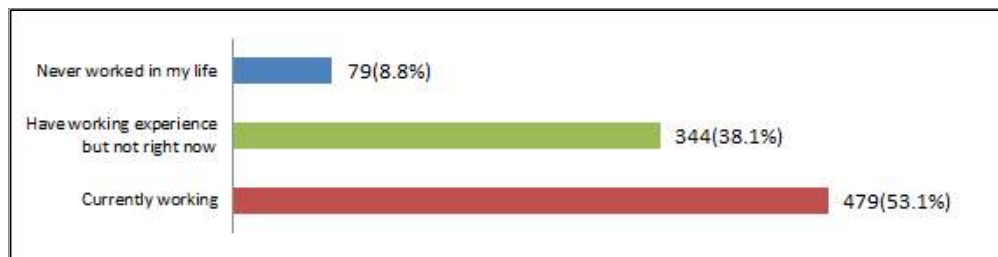
were using public transportations like bus, subway and etc.

- The elderly in Seoul as a whole were using in the order of subway (34.6%), bus (25.7%), walking (25.4%), car (8.9%) that subway was their highest main transportation means, whereas in Gangbuk district it was in the order of bus (55.7%), subway (31.6%), walking (7.8%) that bus usage was significantly high.
- Compared to broad-area based subway, bus is more closely related to community living environments as with sidewalks, crosswalks, and bus stops, and it is main improvement project Target by the district level. This indicates that the district's transportation environment is relatively sound.

2.3.7 Community Involvement Environment

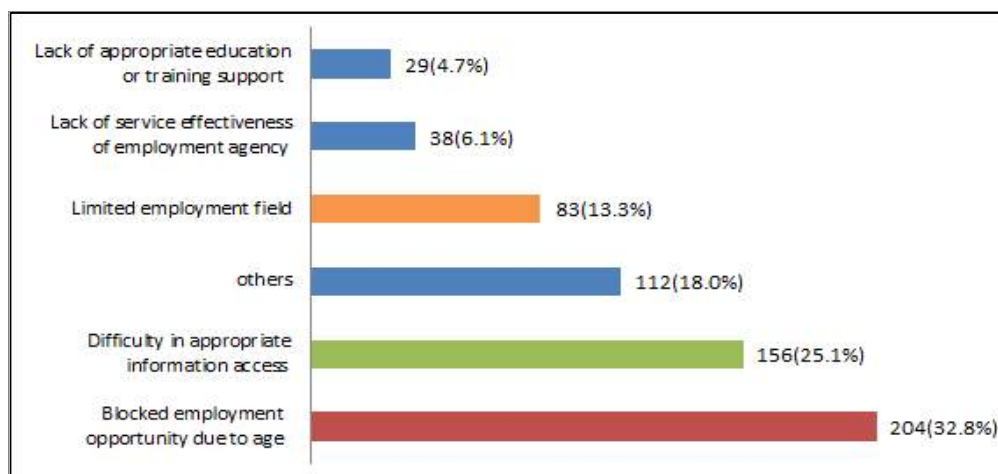
○ Labor Activity

(n=902, unit: person)



○ Difficulty in Preparation for Employment

(n=622, unit: person)



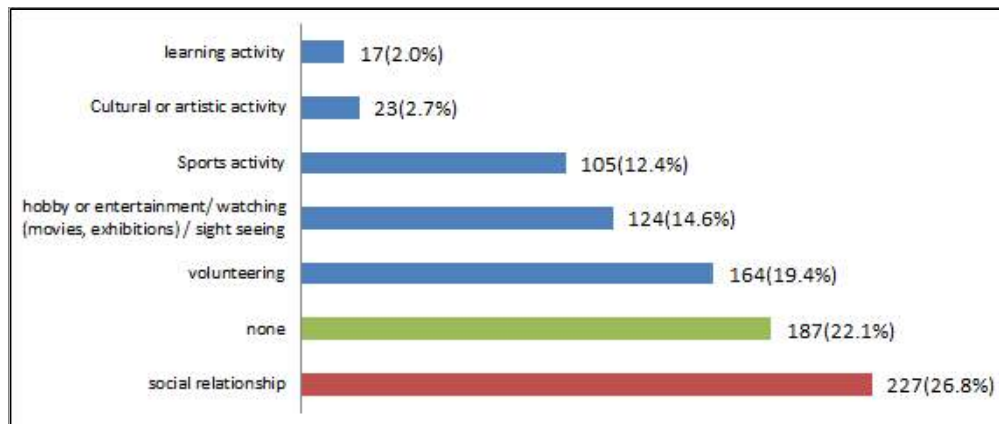
Summary

- The number of elderly currently under employment was 53.1% among the subjects that Gangbuk district's elderly economic activity rate is relatively higher than Seoul City's average (32.5%).
- The number of those who are currently not employed but having working experience was 38.1%, and those who have never worked before was 8.8% that potential working population rate was also lower than Seoul City's average (53.1%, 14.4%).
- Among the limitations to employment activities, employment opportunity block due to age was the highest with 32.8%. When we put limited employment fields for the elderly in the same context, 41.4% of the surveyees regarded ageing as the most limiting factor in labor activities, so to speak.
- Difficulty in information access (25.1%), lack of service effectiveness of employment agency (6.1%), lack of appropriate education or

training support (4.7%), and so forth, which question items demanding quality improvement in elderly employment support program amount to 35.9% that related service enhancement should be done.

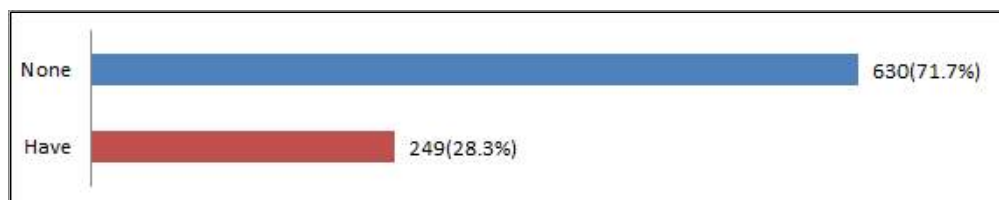
○ Whether Enjoying Hobbies or Leisure Activities

(n=847, unit: person)



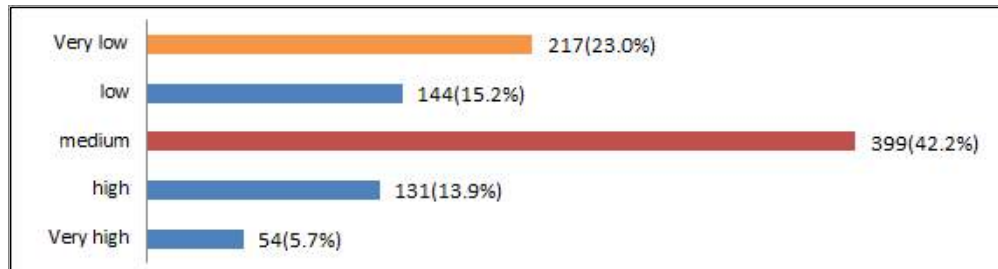
○ Whether Having Experienced Age Discrimination

(n=879, unit: person)



- Subjective Possibility of Dying in Solitude: Average 3.36 Points (5 Point Scale)

(n=945, unit: person)



Summary

- For specific hobbies and leisurely activities described in addition were social relational activities (26.8%) such as meeting friends, participating social clubs, religious groups, and etc., that it shows there are lot of activity at the level of daily interpersonal relationships. At the same time, those who answered they have no hobbies or doing no leisurely activities at all amounted to 22.1% that it shows half of the subjects, i.e., 48.9% of the elderly are only participating daily interpersonal activities than dynamically performing new social ones.
- On the other hand for the question items about whether having experienced age discrimination, yes was 28.3% and no 71.7%. When compared those with average points from Seoul (yes 12.3%, no 87.7%), the elderly of Gangbuk district had higher sensitivity.
- For the question items on the possibility of dying in solitude, Gangbuk elderly scored 2.64 points out of 5 that there is not much of a difference from Seoul City's average point (2.7). However those number is above median point and 18.7% of the elderly were expecting it as high possibility that we need to pay cautious

attention to this subject matter.

- Although all of these answers could be interpreted in various ways, they all reflect the elderly's perception to the level of respect and social inclusion from the community. Thus, we need to encourage the elderly to participate in social activities more, and at the same time to build age-friendly environment promoting social inclusion from the community.

2.4 Discussion

- Gangbuk-gu has the largest portion of elderly among the 25 autonomous districts in Seoul, and has a great demand for creation of an elderly-friendly city. It seems that the creation of elderly-friendly city will be steadily and continuously carried out at the level of local community, not only because Gangbuk-gu has been steadily promoting the projects aimed at improving the health of elderly and creating a safe city since it established the basic ordinances on welfare of elderly in 2013, but also because the current local government has a strong commitment to the same goals.
- In summary, the major findings from the Survey are as follows:

- First, the falling injury was the biggest cause of injury suffered by the elderly residing in Gangbuk-gu. While it is necessary to improve all facilities the elderly use, including their homes, the level of stability in the homes of elderly was relatively low. It is necessary to implement a project that will provide tailored improvements for living environments that will make the homes of elderly more stable. It is especially important to more actively improve the living environments of the Single Elderly and female low-income elderly. Meanwhile, the conditions of bus-rides and walking should be improved together. It is necessary to create an environment where the elderly can easily move to places by providing walkers to more elderly and by repairing the sidewalks.
- Second, while improving the environment to prevent the elderly from getting injured by falling was found to be important, the rate of the elderly participating in falling injury prevention programs was very low. The rate of participation in traffic safety training was also 15.5% - while the elderly heavily rely on the medical treatment, they are not as interested in making safety preparations in daily life as they should be. It is necessary to review the contents and delivery methods of elderly safety training programs.
- Third, the policies aimed at promoting the elderly in Gangbuk-gu to participate in social activities should be

implemented in connection with the policies aimed at increasing their income. 70.0% of the respondents earned no more than KRW 1 million, and the rate of generating income from work was also low. Also, it is necessary to make a more specific approach regarding the female low-income elderly. The female elderly showed lower rates of being ready to improve job skills, as well as enjoying the leisure or hobby activities, than those of the male elderly. It is necessary to simultaneously promote them to continue their income-earning activities and social activities.

- Fourth, while the elderly in Gangbuk-gu were relatively more robust in terms of job-seeking activities than the average in Seoul, it was still difficult for them to get hired. Many respondents said that the types of job they could get were limited, and they were restricted or discriminated based on their age in terms of employment opportunities. Two objectives must be achieved: qualitative improvement of projects aimed at supporting the elderly for employment (e.g. providing adequate information and training); and development of various projects that will allow the social experiences of the elderly to be re-used in the local community.
- Fifth, it is urgently necessary to raise the rate of participation in local community by the elderly, with regard to the above. Almost a half of the respondents (48.9%) said that they limit their scope of social interaction to the

existing relationships, such as the school alumni or religious group, rather than dynamically engaging in new social activities. It is necessary to create an inclusive and dynamic atmosphere to create an elderly-friendly city not through giving and receiving benefits, but through participation, by broadening the scope of participation in the local community activities.

- It is necessary to actively develop not only the supportive projects (e.g. for health or creation of urban environment), but also the projects that require participation of the elderly. It may be helpful to seek for ways to link the projects with the social economy or village corporations, the concepts that are rapidly growing in local communities recently. This not only agrees with 'active aging,' the basic philosophy of the elderly-friendly city, but also has positive effect in promoting the elderly to become useful social resources, thus it will help to reduce the rates of the elderly dying an 'unknown death' or committing suicide.