

고령자 건강 빅데이터 분석과 지역사회 생활환경의 고령친화도 진단

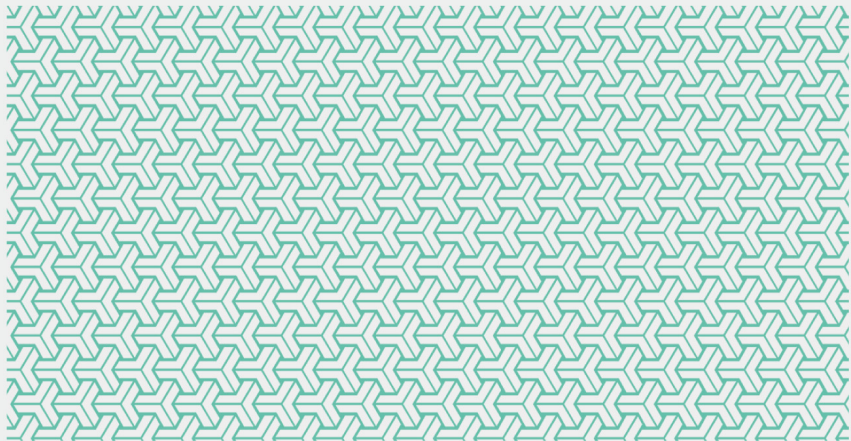
Health Data Analysis and Measuring the Age-friendliness of Urban Environment

고영호 Ko, Youngho
한승연 Han, Seungyeon
손동화 Shon, Donghwa

(a u r i

Health Data Analysis and Measuring the Age-friendliness of Urban Environment

Summary



Ko, Youngho
Han, Seungyeon
Shon, Donghwa

The fast progression into being the super-aged society of Korea requests cross government level responses and policies. However, existing efforts to cope with the aging society focus on the expansion of medical care for the elderly and welfare services centered on the Ministry of Health and Welfare. There is insufficient response and discussion on the architecture and urban environment experienced by the elderly in their daily lives. The survey to suggest the foundation for policy establishment and improvement also inquires about the health status and social relationships of the elderly in accordance with the “Elderly Welfare Act.” It requires an objective and quantitative measurement of the age-friendliness of the architecture and urban environment experienced by the elderly. The World Health Organization(WHO) emphasizes an age-friendliness diagnosis and establishing policies using the diagnosis results as the first step in creating age-friendly cities and communities.

This study established the assessment items for age-friendliness in the living environment of the local community and conducted a pilot diagnosis in 31 cities and counties in Gyeonggi-do. The correlation between regional age-friendliness assessment results and local elderly health status was also reviewed.

As a result of deriving standard indices for asthma, atopy, and rhinitis diseases by city and county through the National Health Insurance Corporation’s Environmental Diseases data from 2013 to 2017, the use of medical care due to the disease in Daejeon, Gwangju, Chungcheongnam-do and Jeollabuk-do was relatively frequent than those regions such as Seoul, Gangwon-do and Gyeongsangbuk-do. As a result of deriving standard indices by city and county for 12 variables such as exercise ability, daily activities, anxiety/depression, etc. through the National Health and Nutrition Survey data from 2013 to 2017, the health level of Seoul and Sejong City was analyzed to be better than the health level of Gangwon-do and southwestern regions. As a result of deriving standard indices for 18 items such as walking practice rate and subjective health level awareness rate through the Community Health Survey data from 2013 to 2017, the health level of Chungcheongnam-do,

Jeollanam-do, and Gyeongsanbuk-do was found to be better than Gwangju, Daegu, Ulsan and Busan. As a result of deriving standard indices by city and county for 27 variables such as walking travel time to community centers through the Elderly Survey data in 2017, the overall satisfaction level of daily life in the community of Seoul, Sejong City, and Gyeonggi-do was found to be better than Daejeon, Chungcheongnam-do, Gyeongsangbuk-do, and Jeollanam-do. As a result of synthesizing the above four health data analysis results into standard indices for each city and county, the health of the elderly is good in areas such as Seoul, Ulsan, Gangwon-do, and Gyeongsanbuk-do. It was reviewed that the health of the local elderly was inadequate in areas such as Daejeon, Gwangju, Chungcheongbuk-do, and Jeollanam-do.

This study also reviewed domestic and foreign previous studies and cases related to the existing diagnostic indicators for the living environment in the local community, selected diagnostic indicators for the age-friendliness of the living environment in the community, and developed a diagnostic method. Focusing on the areas of outdoor space and facilities, transportation, and housing, the assessment items for the age-friendliness of the living environment of the local community were indexed. Public administration information that can represent the meaning of each indicator was collected. Thirty-one cities and counties in Gyeonggi-do were selected as targets for pilot application, and population data as of December 2019 and administrative information on age-friendly diagnosis close to the time of 2020 were used. The age-friendliness of the living environment of 31 cities and counties in Gyeonggi-do was divided into 12 indicators for the physical environment, 7 indicators for the social environment, and 9 indicators for the service environment, and the results were summarized. Diagnosis results were standardized with z-score(t-score) and summed to overcome the limitations of different units for each indicator. Among the results of the analysis of the health status of the elderly in each city and county previously analyzed, further analysis was conducted only in the Gyeonggi-do region, and Pearson's correlation analysis with the results of age-friendliness diagnosis in 31 cities and counties in Gyeonggi-do.

The age-friendliness assessment of the living environment in the local community derived by this study can be applied nationwide, and it can be repeated at any time because of using public administration data by local government officials and any public. In this study, the pilot application has a limitation due to the comparison only among 31 cities and counties in Gyeonggi-do region. Considering that the creation of an age-friendly living environment should be made in a smaller administrative area than at the city/county level, there is a limit to the interpretation of the pilot diagnosis of age-friendliness at the city/county level and implications. In the future, it is necessary to improve the diagnostic indicators and methods applicable to small-scale regional units using the age-friendly diagnostic indicators derived in this study. Through the nationwide application, this study hopes that quantitative age-friendliness diagnosis in Korean local communities can be carried out in the future.

Keywords :

Aging, Aged Society, Age-friendliness, Diagnosis, Age-friendly City, Age-friendly Community