

Income- and Education-related Disparities in Unhealthy Lifestyle Habits and Their Implications

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Introduction

According to “Global Burden of Disease: Country Profile,” a study conducted in 2014 by the Institute for Health Metrics and Evaluation, the top three risk factors for the burden of disease in Korea in 2013 were “tobacco smoking,” “poor diet,” and “alcohol use.” “Lack of exercise” came in 8th on the list.

“Smoking cessation,” “alcohol abstinence,” “physical exercise,” and “nutrition” are among the core areas of the “Community-based Integrated Health Promotion Project,” and their indicators are being managed to represent the project on “Healthy Lifestyle Practice” in the framework of the 4th National Health Plan (2016~2020). Income-related disparities in these four areas have been designated as health equality indicators in the 4th National Health Plan. However, the health equality indicators in the Health Plan concern health disparities with respect to only income, and the top and bottom income levels at that. For this reason, social gradients¹ in health in the context of the 4th National Health Plan are not as evident as they should otherwise be, and fail to capture the full extent of health disparities across different socioeconomic strata.

It is widely known that people have different levels of health depending on their socioeconomic positions. The better off people are, the more likely they are to live longer in better health. For centuries, a wide range of approaches have revealed the direct association of health with socioeconomic positions, with numerous epidemiological studies consistently showing that morbidity and mortality differ across people of different socioeconomic strata.

This study defines its unhealthy lifestyle indicators in terms of “current smoking,” “high-risk drinking,” “no muscle exercise,” and “food insecurity” (“the state of being without reliable access to a sufficient quantity of affordable, nutritious food”).² The subjects of this study are grouped into four clusters: those with no unhealthy lifestyle habit; those with one unhealthy lifestyle habit; those with two unhealthy lifestyle habits; and those with three unhealthy lifestyle habits.

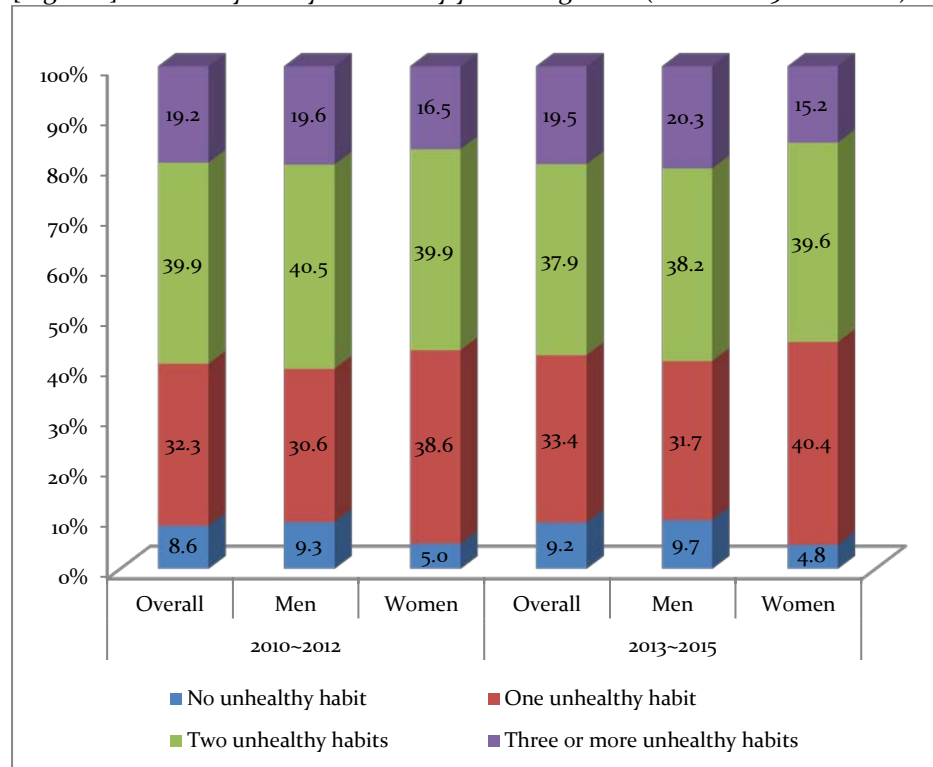
¹ Health inequalities take the form of gradients across the whole spectrum of socioeconomic status. Take income as an example. Health inequalities arise not only among people of the lowest income bracket; they emerge in the form of gradients across all but top income groups. This is why monitoring of health inequalities needs to cover all income brackets, not just the lowest one.

² The rate of current smokers is the percentage of adults aged 19 and older who smoke every day or from time to time; the rate of high-risk drinkers is the percentage of adults aged 19 and older who binge drink at least once a week; the prevalence of “no muscle exercise” here means the percentage of those who are not among people aged 19 and older who in the past week have worked out at least two days doing push-ups, sit-ups, barbell lifts and/or bench presses; the prevalence of food insecurity refers to the percentage of households (i.e., their members) that often or from time to time have encountered the difficulties of not having enough food. [National Health Statistics (2015, 2016), Ministry of Health and Welfare & Korea Centers for Disease Control and Prevention, pp. 327~352]

Income-related gaps in unhealthy lifestyle habits

The proportion of those with no unhealthy lifestyle habit increased from 8.6 percent in the period 2010~2012 to 9.2 percent in the period 2013~2015. Among men, both those with no unhealthy lifestyle habits and those with three or more unhealthy lifestyle habits were higher in proportion for the period 2013~2015 than for the period 2010~2012; among women, both those with no unhealthy lifestyle habits and those with three or more unhealthy lifestyle habits shrunk in percentage terms.

[Figure 1] Unhealthy lifestyle habits by year and gender (for those 19 and older)



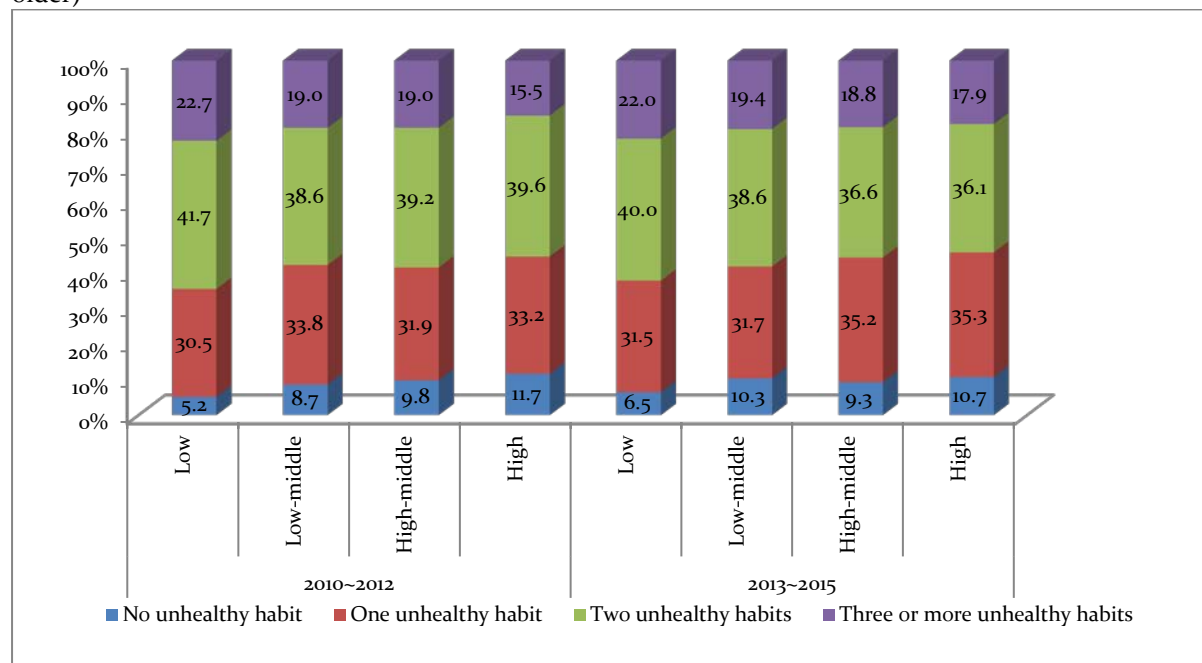
Note: author's construction based on data from the National Health and Nutrition Examination Survey (Ministry of Health and Welfare & Korea Centers for Disease Control and Prevention)

The difference between the high and low income groups in the proportion of those without any unhealthy lifestyle habits has declined to 4.2 percentage points in the years 2013 through 2015 from 6.5 percentage points in the years 2010 through 2012. The difference in the proportion of those with three unhealthy lifestyle habits between the two income groups also declined, from 7.2 percentage points in the years 2010 through 2012 to 4.1 percentage points in the years 2013 through 2015. Inequalities in unhealthy lifestyle habits are a problem not just for low-income people. Social gradients in health have been found evident in all income categories in both periods, 2010~2012 and 2013~2015. Inequalities in healthy lifestyle habits were pervasive in all but the highest income category.

Among men, the proportion of those having no unhealthy lifestyle habit was 3.4 percentage points higher in the top income group than in the bottom income group. For women, the difference between the top and bottom income groups was greater at 5.9 percentage points. The difference between the top and bottom income groups in the proportion of those with three or more unhealthy lifestyle habits was 4.1 percentage points for men and 9.8 percentage points for

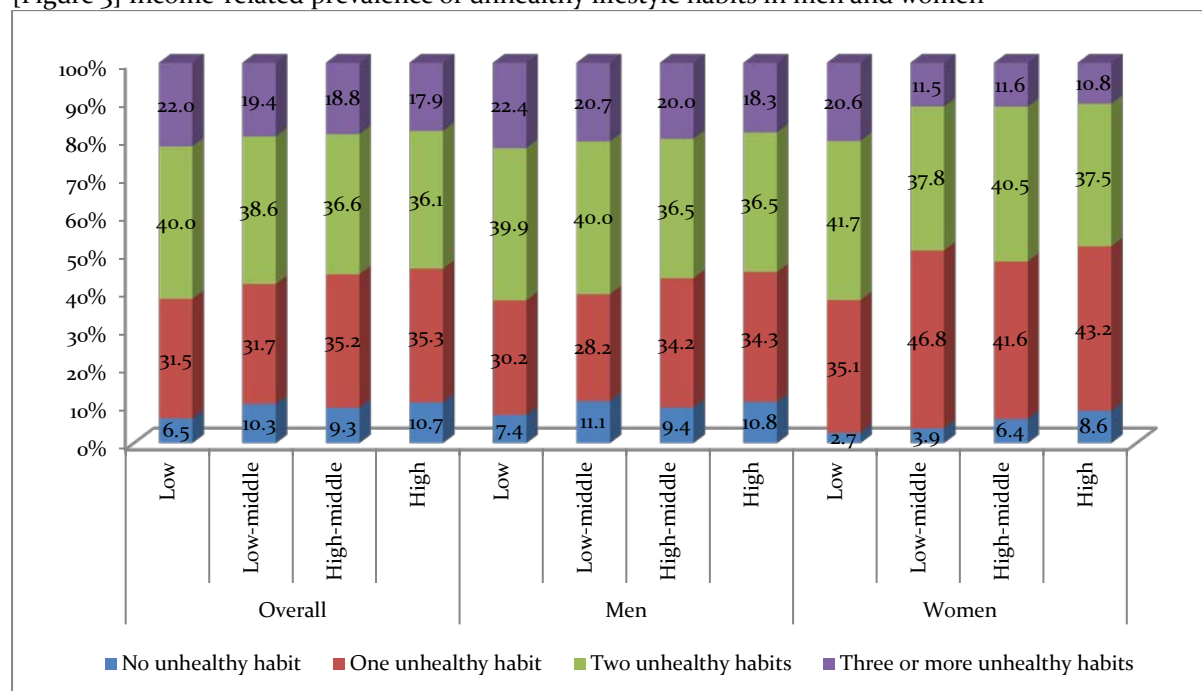
women. Income-related social gradients in unhealthy lifestyle habits remained evident even when separated by gender. Income-related unhealthy lifestyle habits for women, while less prevalent than those for men, nevertheless showed clear social gradients.

[Figure 2] Income-related prevalence of unhealthy lifestyle habits, by year (for those 19 years of age and older)



Note: author's construction based on data from the National Health and Nutrition Examination Survey (Ministry of Health and Welfare & Korea Centers for Disease Control and Prevention)

[Figure 3] Income-related prevalence of unhealthy lifestyle habits in men and women



Note: author's construction based on data from the National Health and Nutrition Examination Survey (Ministry of Health and Welfare & Korea Centers for Disease Control and Prevention)

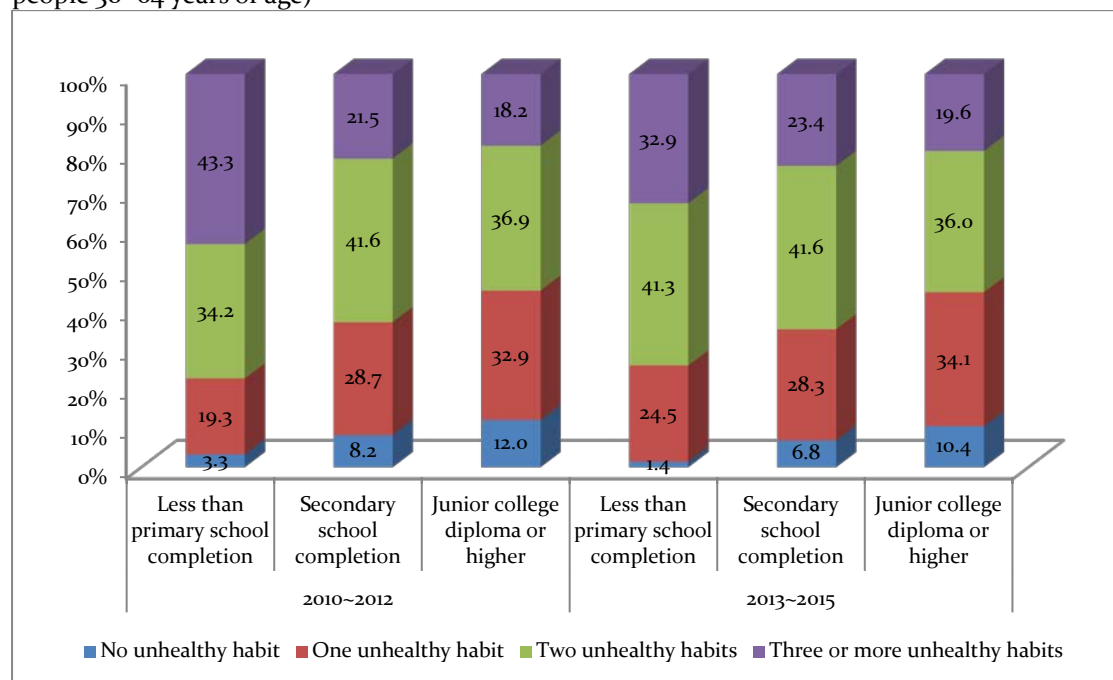
Education-related gaps in unhealthy lifestyle habits

Among Koreans aged 30~64, the difference in the prevalence of no unhealthy lifestyle habits between those with high and low educational levels increased from 8.7 percentage points for the period 2010~2012 to 9.0 percentage points for the period 2013~2015. When it came to those with three or more unhealthy lifestyle habits, the education-related prevalence gap was much wider at 25.1 percentage points for the period 2010~2012 and 13.3 percentage points for the period 2013~2015.

Among those aged 65 and older, the prevalence of “no unhealthy lifestyle habits” was relatively high, with the already-wide education-related gap increasing over recent years, from 13.3 percentage points for the period 2010~2012 to 18.3 percentage points for the period 2013~2015. As has been the case with income-related inequalities, education-related inequalities in unhealthy lifestyle habits are a problem not just for people with lowest educational attainment: social gradients are evident across all educational attainment groups.

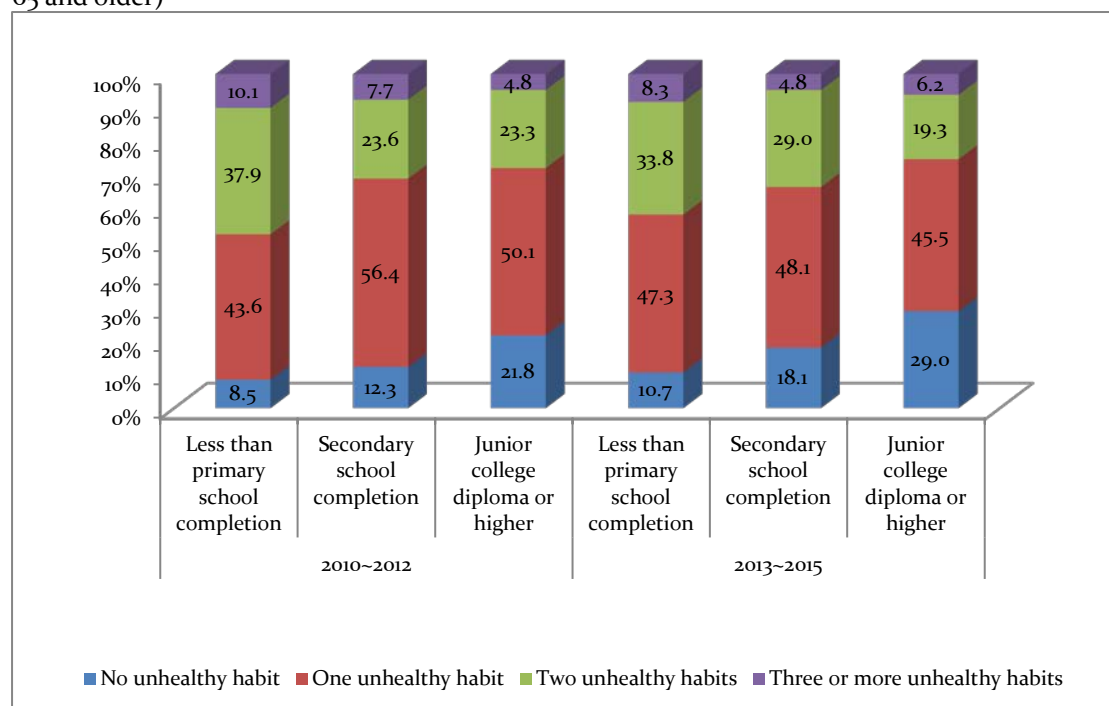
Considering the large generational difference in educational attainment, this study constructed indicators for two different age cohorts: those aged 30~64 and those aged 65 and older. For both cohorts, social gradients in unhealthy lifestyle habits were more marked across the educational attainment range than across the income range.

[Figure 4] % of those with and without unhealthy lifestyle habits, by year and educational level (for people 30~64 years of age)



Note: author's construction based on data from the National Health and Nutrition Examination Survey (Ministry of Health and Welfare & Korea Centers for Disease Control and Prevention)

[Figure 5] % of those with and without unhealthy lifestyle habits, by year and education level (for people 65 and older)



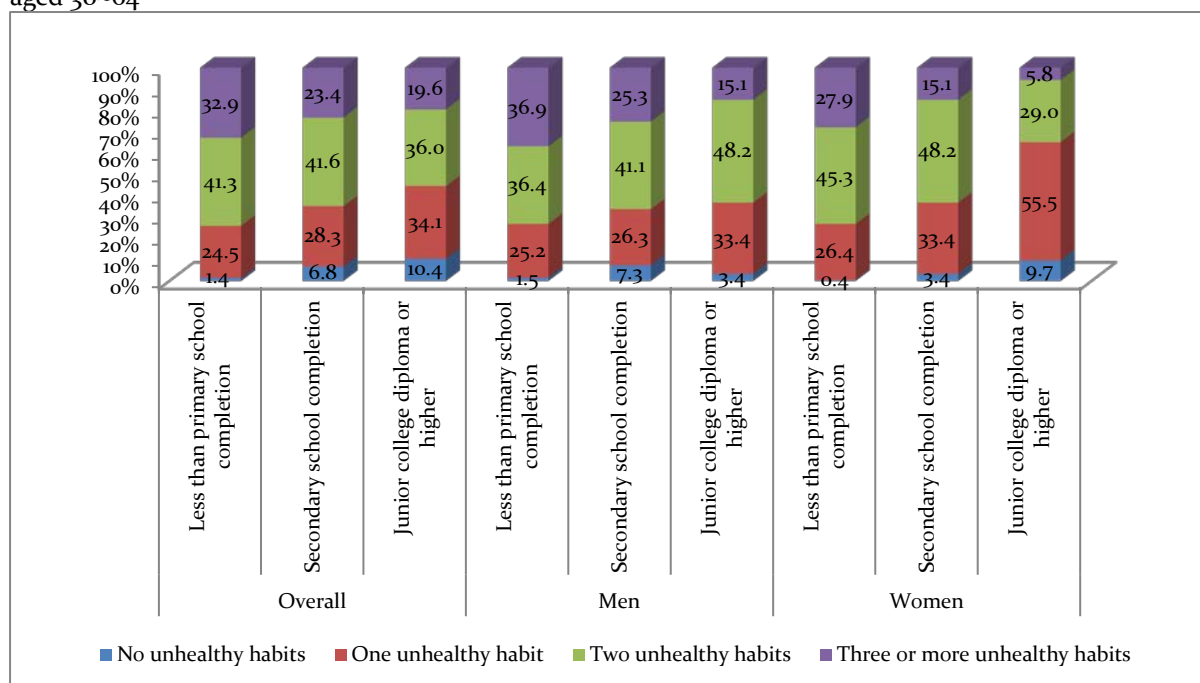
Note: author's construction based on data from the National Health and Nutrition Examination Survey (Ministry of Health and Welfare & Korea Centers for Disease Control and Prevention)

Among men aged 30~64, there was a 1.9-percentage-point difference between the top and bottom education groups in the proportion of those without any unhealthy lifestyle habits. For women of the same age category, the gap was much wider at 9.3 percentage points. The education-related gap in the prevalence of three or more unhealthy lifestyle habits was 21.8 percentage points for men and 22.1 percentage points for women.

In those aged 65 and older, the education-related difference in the prevalence of “no unhealthy lifestyle habits” was 16.5 percentage points for men and 16.8 percent for women. For men in the same age cohort, the prevalence of three or more unhealthy lifestyle habits differed as little as 0.4 percentage points between those with high educational and those with low education. For women of the same age range, the gap was much larger at 17.6 percentage points.

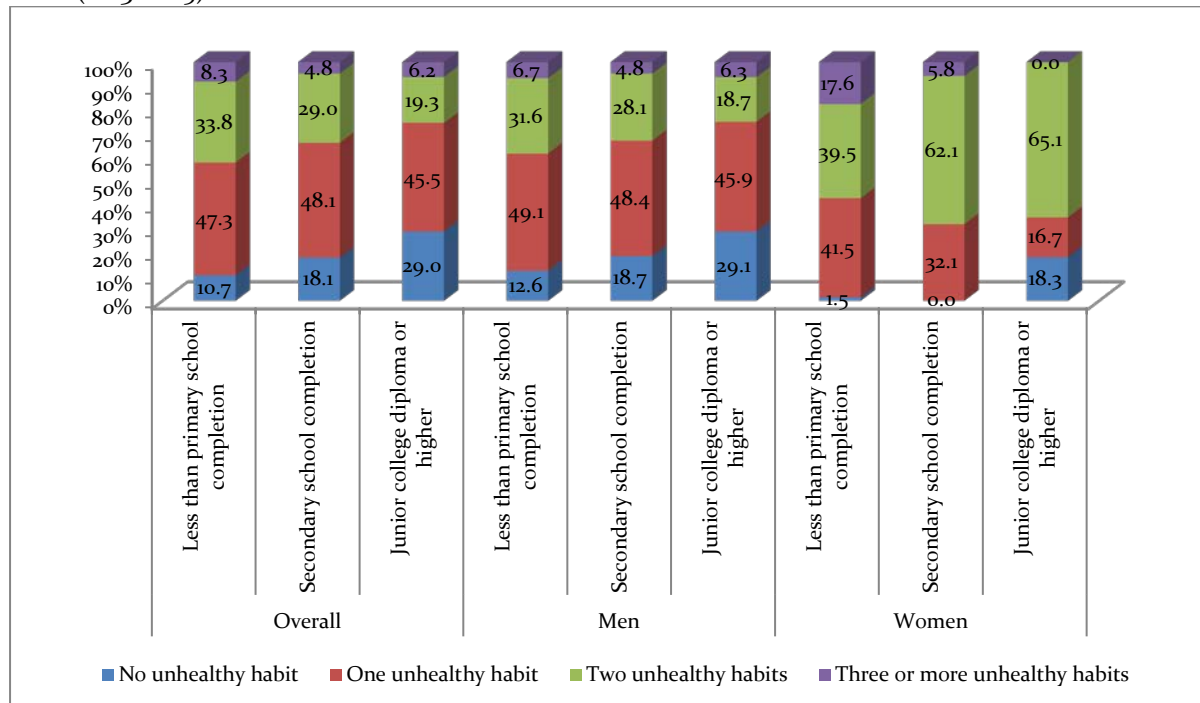
Education-related gradients in unhealthy lifestyle habits were evident for both men and women. In men and women alike, there were education-related disparities in the form of gradients in both those with three or more unhealthy lifestyle habits and those with no such habits.

[Figure 6] Gender and education-related disparities in unhealthy lifestyle habits (2013~2015), for those aged 30~64



Note: author's construction based on data from the National Health and Nutrition Examination Survey (Ministry of Health and Welfare & Korea Centers for Disease Control and Prevention)

[Figure 7] Education-related disparities in unhealthy lifestyle habits for men and women aged 65 and older (2013~2015)



Note: author's construction based on data from the National Health and Nutrition Examination Survey (Ministry of Health and Welfare & Korea Centers for Disease Control and Prevention)

Concluding remarks

A study conducted in 1998 on the waxing and waning of health inequality discourse in Europe has shown that although different countries responded in different ways to health

inequalities, with each leading to different outcomes, at the beginning end of the spectrum of actions taken in response to the problem of health inequalities was measuring and monitoring of health disparities.³ Monitoring is essential as it can help bring the problem of health inequalities to social attention and trigger policy responses thereto.

This study confirmed that income- and education-related disparities were pervasive in unhealthy lifestyle habits. Inequalities in unhealthy lifestyle habits are a problem not only for groups with low income and low education, as there were evident socioeconomic gradients across all income and education levels. Inequalities in unhealthy lifestyle habits were more pronounced between different educational attainment groups than between different income groups.

Inequalities in unhealthy lifestyle habits, while seemingly stemming from individual choices, have in their background social causes. Differences in socioeconomic status lead to disparities in lifestyle habits and, in turn, to health inequalities. In its 2008 report entitled “Closing the Gap in a Generation,” the World Health Organization Commission on Social Determinants of Health has underscored the cardinal importance of improving “the conditions of daily life” as a way to reduce health inequalities.

A good way to reduce inequalities in unhealthy lifestyle habits is by strengthening health promotion interventions so as to help guide those of low socioeconomic status to move toward healthy habits. To this end, the Comprehensive Health Promotion Program, which as it stands serves the general public uniformly, covering cities, boroughs and counties, should be administered based on the different needs of various socioeconomic groups. This is to say that the health promotion program will need to focus more on people of low socioeconomic status, espousing the principle of “proportionate universalism.”

Health inequalities are in themselves unfair and affect virtually everyone in the general population, but their adverse impact can be curbed through effective policy measures. Improving people’s health levels requires commitment to reducing health inequalities. To this end, monitoring should be carried out on a regular basis to gauge how health inequalities change over time.

³ Whitehead, M. (1998). Diffusion of ideas on social inequalities in health: a European perspective. *Milbank Q*, 76(3), 469-492.