

Factors Affecting the Experience of Subjective Cognitive Decline in Adulthood that Interfere with Daily Living: Utilizing Data from the 2018 Community Health

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Abstract

This study aims to identify factors that influence Subjective Cognitive Decline (SCD), a condition in which an individual complains of subjective cognitive decline in adulthood, but scores in the normal range on objective cognitive function tests. SCD can appear as an early sign of cognitive decline, but it can also be the result of a psychiatric disorder, affecting independent living, level of functioning, and disrupting daily activities, negatively impacting overall quality of life. Factors that interfere with the daily lives of people experiencing subjective cognitive decline include age (19-29), professional and white-collar occupations, income less than KRW 2 million or more than KRW 4 million, poor subjective health, depression, and poor sleep quality, while those with a spouse, those who read nutrition labels on food, and those with moderate subjective stress were less disrupted, and those who were disrupted had a lower quality of life. Therefore, it is necessary to identify the factors that contribute to subjective cognitive decline in adulthood and to try to intervene early, such as maintaining a healthy lifestyle, promoting mental activity, staying socially active, managing stress, and getting regular health checkups. The public health care system should also increase attention to SCDs and increase outreach efforts to manage them.

Key words: adulthood, subjective cognitive decline (SCD), daily living

I. Introduction

The risk group for dementia is the elderly over the age of 65, but in recent years, there has been an increase in the number of people in their 40s and 50s. Last year, there were 1,151 dementia patients in Korea under the age of 40, and 35,608 in the 40-59 age group. In 2019, 276,045 people were diagnosed with mild cognitive impairment, a significant 19-fold increase in the number of diagnoses over the past decade, and people under the age of 65 accounted for 20 percent of the total. According to a survey by the Centers for Disease Control and Prevention (CDC), the prevalence of subjective cognitive decline (SCD) is 11.1%, or 1 in 9 adults, but few people report consulting a professional. Therefore, it is necessary to pay attention to the experience of subjective cognitive decline in adulthood.

II. Theoretical Discussions

From the perspective of Cognitive Load Theory, the cognitive load on working memory varies from person to person and situation to situation (Sweller, 1988), making it even more important to consider the constantly changing cognitive load of individuals in the field of problem solving (Paas, Tuovinen, Tabbers, & van Gerven, 2003). Cognitive overload occurs when a person is cognitively overwhelmed, such as excessive stress or excessive workload, and cognitive overload affects cognitive performance and needs to be considered (Yang & Lim, 2011).

While some cognitive decline may occur as adults age, frequently forgetting how to perform everyday tasks is not a normal part of aging and can affect a person's ability to live and function independently (Jessen et al, 2014). Experiencing cognitive decline in adulthood may contribute to addiction, hypostimulation, stress, and depression (Shin et al, 1999). SCD can go beyond thinking and memory, disrupting daily activities and affecting overall quality of life (Anderson et al, 2015). Therefore, subjective cognitive decline in adulthood is becoming much more important than in the past.

III. Problems and Challenges

1. Problems

Several studies have reported that older adults experiencing subjective cognitive decline are more strongly associated with biological markers of Alzheimer's type dementia than those who do not (Pike et al, 2022), and that SCD can appear as an early sign of cognitive problems but also as a consequence of psychiatric disorders (Krebs et al, 2003). As the average life expectancy in Korea is increasing, modern people want to live a healthy old age. However, emotional problems such as mental stress and the development of machines such as smartphones are affecting daily life by causing people to experience memory decline or cognitive slowdown through the act of searching for various information rather than remembering new information. Most studies on factors affecting subjective cognitive decline have been conducted in older adults, and few studies have been conducted in adulthood. Identifying factors that influence the experience of subjective decline in adulthood is important for early screening and prevention of cognitive decline.

2. Challenges Based on data from the 2018 Community Health Survey, we examined differences in general characteristics and daily living impairment among those who experienced subjective cognitive declines in health by subjective health status and health type and found differences in gender, age group, spousal status, education, income, subjective health status, smoking, alcohol use, nutrition label recognition, subjective stress levels, depression, sleep quality, and quality of life.

The odds of experiencing subjective cognitive decline that interfered with daily life were 1.70 times (95%CI: 1.26-2.29) higher among 19-29 year olds than 40-49 year olds, and 1.35 times (95%CI: 1.04-1) higher among professional and office workers than other occupations. Those earning less than KRW 2 million per year were 1.61 times (95%CI: 1.17-2.21) more likely to experience subjective cognitive decline than those earning KRW 2 million to KRW 4 million, and 1.29 times (95%CI: 1.17-2.21) more likely than those earning KRW 4 million or more. Having a spouse was associated with 0.72 times (95%CI: 0.56-0.92) the odds of experiencing subjective cognitive decline that interfered with daily life, recognizing nutrition labels on food was associated with 0.76 times (95%CI: 0.62-0.94) the odds of experiencing subjective cognitive decline that interfered with daily life, and having a moderate level of subjective stress was associated with 0.74 times (95%CI: 0.59-0.94) the odds of experiencing subjective cognitive decline that interfered with daily life. On the other hand, subjectively perceived poor health was 1.47 times (95%CI: 1.07-2.01), depression was 2.25 times (95%CI: 1.75-2.90), and poor sleep quality was 1.85 times (95%CI: 1.44-2.39) more likely to interfere with daily activities. Quality of life was 0.05 times (95%CI: 0.02-0.14) lower if activities of daily living were interfered with.

One effective intervention is to delay the negative effects of cognitive decline as much as possible (Ha, 2014). Prevention of cognitive decline can be achieved through strategies such as maintaining a healthy lifestyle, promoting mental activity, staying socially active, managing stress, and getting regular health checkups (Choi, 2020). The public health care system should also increase awareness of SCDs and promote their management.

IV. Conclusions

In order to prevent cognitive dysfunction in Korea's aging society, it is necessary for all of us to actively manage our health. To do this, it is necessary to systematize the current assessment of cognitive function and expand health activities that can reduce negative effects on cognitive function. In addition, mental health issues such as depression and sleep should be taken into consideration as they affect cognitive decline, so that they can be actively treated.

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