An empirical approach to analyzing effects of disease and activity limit on depression prevalence rate in the elderly depending on stress experience: KNHANES Data Analysis

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<Abstract>
Objectives: By using six years of KNHANES dataset (2008–2013) about 60 ages older people, we analyzed how the depression prevalence rate in the elderly is influenced by disease and activity limit. Especially, to add a sense of more reality, we adopted stress experience as a control variable to see how the depression prevalence rate in the elderly is influenced by disease and activity limit depending on the stress experience. Methods: We adopted six years of KNHANES dataset, indicating that our results were based on long period of time capable of considering temporal patterns in the depression prevalence rate in the elderly. Total 1,160 elderly people in KNHANES were selected for our empirical analyses. Dependent variable is either 0 or 1 depending on whether the elderly people feel depression. Main explanatory variables for our study include disease and activity limit. Logistic regression analysis was applied for two group such as stress experience and non-experience. Results: According to the empirical results, stress factor is found to be significant in explaining the depression in the elderly. Depression prevalence rate increased when the elderly has stress experience: chronical disease(OR=1.650), chronical disease with activity limit(OR=3.388), non-chronical disease with stress(OR=11.841) chronical disease with stress (OR=13.561) and chronical disease with activity limit and stress(OR=28.691). Conclusions: The finding suggest that the Countermeasures of elderly’s depression alleviation should include stress management.

Key words: KNHANES, depression in the elderly, stress, logistic regression

I. 서론
우울증은 자살생각의 증가와 업무손실 및 의료비증가 등을 유발함으로써 대량의 사회경제적 비용을 야기하고 있다. 우울증에 대해 국민건강보험공단에서 추정한 병원비를 포함한 전체 사회경제적 비용은 연간 약 10조원으로 추산되고 있는데, 이는 매년 증가하는 추세이다(Lee et al., 2013). 특히 고연령층의 우울증 유병률은 상대적으로 높은 것으로 밝혀졌다(Lee & Lee, 2002). 국가통계자료에 의하면 60대의 7.3%, 70대 이상의 11.2%가 우울증을 겪고 있다.