

Executive Summary

The mortality rate and medical cost by the national health examination analysis

□ Introduction

: In Korea, the national health examination has started since the mid-1980s. Since then, the public interest in prevention and early detection of diseases has been increasing, which in turn caused the rise in the national health screening program enrollee as well as the demand for health testing business to conduct effectiveness assessment. In this study, 1) we analyzed whether the health examination could prevent disease occurrence and mortality; and 2) we determined the medical cost.

□ Method

: The occurrence, mortality risk, and medical cost expenditure of target group 1 with atherosclerotic cardiovascular disease, ischemic heart disease, stroke, and all-cancer were determined by the number of health examinations conducted between 1992 and 2000 (i.e. 1-2, 3-4, and ≥ 5 times). We additionally analyzed the occurrence and mortality risk of target group 2 with atherosclerotic cardiovascular disease, ischemic heart disease, stroke, and all-cancer using the period between the year in which the last examination was conducted and 2011.

□ Results

1) Determination of the Occurrence and Mortality Risk of Diseases by Frequency of Health Examination

: For target group 1 and 2, the risk of diseases increased among both genders who had their health examinations more frequently, and participants who had their health examination more than five times showed lower mortality risk than those who had not.

2) Determination of Medical Cost by Frequency of Health Examination

: The average medical cost of target group 1 decreased as the frequency of health examination increased (>5 times), and this trend was more obvious in women than in men.

Conclusions

: In this study, the implementation of national health examination showed positive effect on mortality risk and health cost; both mortality risk and health cost decreased as the number of health examination increased. It is considered more studies should be conducted on the association of health examination with preventive effect of disease incidence.

National health examination, Mortality rate, Medical cost
