

# SUMMARY

## 1. Title

Lifetime cost of obesity and smoking and long-term effectiveness of health promotion

## 2. Major Results

### The Socioeconomic Cost of illness in Korea

We estimate both direct and indirect costs of diseases in Korea in 2007 using a prevalence-based approach. The cost of diseases in Korea in 2007 is 56,063 billion Won based on 0% discount rate. The estimate represents approximately 6.28% of GDP.

### The Socioeconomic Cost of Smoking and Obesity

The estimated economic cost of diseases due to smoking in Korea in 2007 is 5,460 billion Won at 0% discount rate. The cost of lung cancer caused by smoking is 1,210 billion Won, the cost of stroke caused by smoking is 1,146 billion Won.

Direct medical cost of obesity is 994 billion Won and medical costs related to obesity is 3,527 billion Won. The socioeconomic cost of adolescent obesity is about 1,363,800 million Won. We provide the estimates by sex: 867,783 million Won for male 496,023 million Won for female.

## □ Stroke Lifetime Cost and Life Expectancy of Obesity and Smoking

We have performed simulations 100,000 hypothetical cohort of men to estimate lifetime medical cost from 40-year to death in case of stroke. The results show that lifetime medical cost of stroke due to obesity and smoking.

This study has been to estimate lifetime medical cost of smokers, non-smokers and ex-smokers focusing on stroke. We find that lifetime medical costs for stroke would be 35,280 thousands Won, 24,060 thousands Won and 27,330 thousands Won for smokers, never-smokers and ex-smokers.

Lifetime medical cost of stroke due to obesity would amount to about 34,100 thousands Won for a 40-year man. And lifetime medical cost for stroke treatment would amount to about 28,240 thousands Won for a non-obesity 40-year man.

## □ Policy Directions for Health Promotion

- price regulation and sin tax for smoking
- access of healthy food
- incentive development for healthy regional community
- healthy environmental support using health promotion financing