most lethal. Injuries from handguns can have extreme clinical and substantial economic consequences, as well as social implications.

HEALTH POLICY

HEALTH POLICY—Burden Of Illness Studies

PHOTO5

EVALUATING THE COSTS OF DISEASES IMPUTABLE TO STRESS AT WORK

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OBJECTIVE: The effects of work-related stress are generally judged to be detrimental to workers’ health and costly for society. The purpose of this study is to set out an evaluation of the costs of work-related stress for France. METHODS: Occupational stress is defined according to Karasek and Theorell’s model. Illnesses included in the study are cardiovascular diseases, depression, musculoskeletal diseases and lower back pain. The model resorts to the principle of attributable fractions, which is based on two parameters, 1) prevalence of exposure to occupational stress, (2) relative risk to develop an illness as a consequence of occupational stress. The valuation of these two parameters is based on a systematic review of scientific literature (epidemiological studies). Cost estimates include medical costs, cost of absence from work, loss of potential output because of years of activity lost before retirement age and a valuation of years of life lost attributable to occupational stress (per capita GDP). Cost estimates are based on national statistical reports and reported in 2000 Euros (€). RESULTS: The sensitivity analysis shows that from 220,500 to nearly 335,000 persons (from 1% to 1.4% of working population) were affected by illnesses attributable to work-related stress and from 1600 to nearly 3000 people died as a result of their illness. As for the diseases considered here, work-related stress costs society from 830 million to 1656 million in France, which represents from 0.06% to 0.12% of GDP, and from 10.3% to 20.5% of the total spending of social security work injuries branch. CONCLUSIONS: These results reflect a certain proportion of total economic and human burden of occupational stress. The study underlines the necessity of convergent epidemiological studies capable of determining as reliably as possible the value of relative risk for the illnesses.

PHOTO6

THE SOCIOECONOMIC COST OF DISEASES DUE TO SMOKING IN KOREA

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OBJECTIVE: Among OECD countries, Korea is of the highest percentage of males aged 15 and over that are daily smokers. This study aims to estimate the socioeconomic cost of diseases due to smoking and to compare with that of all and smoking-related diseases in Korea. METHODS: This study employs a prevalence-based approach. First, we estimate both direct and indirect costs of smoking-related diseases, which are selected from reviewing existing studies. Direct costs include medical care expenditures, traffic costs, and caregiver’s costs. Indirect costs are estimated based on human capital theory. Next, we compute population attributable risks (PARs) caused by smoking by disease, age and sex. The socioeconomic costs of diseases due to smoking are obtained by multiplying the costs of smoking-related diseases by PARs. We report the estimates at 40 – 69 age group in USA Purchasing Power Parity Dollars. The major data sources are National Health Insurance Statistical Yearbook, Annual Report on the Cause of Death Statistics, Survey Report on Wage Structure, National Health and Nutrition Survey, the Korean Statistical Information System, and information such as a report from CDC in U.S.A. RESULTS: The estimated economic cost of diseases due to smoking in Korea in 2001 is 3.92 billion USA PPP$ (hereafter) at 0% discount rate, which accounts for 13.8% of the cost of all diseases and 42.8% of smoking-related diseases at aged 40 – 69. The costs of males and females are $3.72 billion and $0.20 billion, respectively. The cost of malignant neoplasms caused by smoking is $1.86 billion (42.3% of the cost of the diseases), cardiovascular disease, $1.55 billion (41.0%); respiratory disease, $0.51 billion (16.6%). CONCLUSIONS: The economic burden of diseases due to smoking is about 32.8% (9.5%) of that of smoking related diseases and 18.8% (2.3%) of all diseases in males (females).
Direct cost estimates include medical expenditures, traffic costs and caregiver’s cost. Indirect costs representing the loss of production include lost workdays due to illness and lost earnings due to premature death and are estimated based on human capital theory. The cost estimates are reported in USA Purchasing Power Parity Dollars and calculated at three different discount rates (0%, 3% and 5%). The major data sources are National Health Insurance Statistical Yearbook, Annual Report on the Cause of Death Statistics, and Survey Report on Wage Structure. We also use other information such as the Korean Statistical Information System. RESULTS: The cost of diseases in Korea in 2001 is 30.0 billion US PPP$/($ hereafter) based on 0% discount rate. The estimate represents approximately 6.6% of GDP or $1627 per person. Direct and indirect costs are estimated at $26.1 billion (32.2% of total cost) and $23.9 billion (47.8%), respectively. And it is found that the cost at aged 40 – 49 accounts for the largest proportion (22.2%) at age group and the cost of the male is 23.6% higher than that of the female. In the case of major diseases, the total cost of neoplasms is $8.2 billion; $7.4 billion in diseases of digestive system; $6.5 billion in diseases of respiratory system; and $5.9 billion in diseases of circulatory system. CONCLUSIONS: This study can be expected to provide valuable information for determining intervention and funding priorities, and planning for health policy.

HEALTH POLICY

HEALTH POLICY—Health Care Decision Studies

PEER PRESSURE IN HEALTH CARE
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OBJECTIVES: Past literature has shown that peer pressure shows significant effects on the probability that a young adult will commit a crime, a juvenile will start to smoke, a student will begin to study hard, etc. Almost all of the activities documented so far discuss the phenomena that one’s behavior is influenced by others around him and has an impact on one’s own self. However, in the health care field, if peer pressure among physicians does exist, then it has an impact not only on the physicians alone, but also on the patients as well. Therefore, this topic deserves special attention, but as far as we know, there has not been any related research. In this study we will investigate the impact of peer pressure on the cesarean-section decision.

METHODS: Taiwan implemented its National Health Insurance (NHI) in 1995. It is a single-payer system with a pre-determined fee schedule. The health delivery system is a closed one with physicians being employed by hospitals, and a physician’s income depends primarily upon the services he provides. A logistic model is employed, with 1 indicating that the delivery was performed by cesarean section, utilizing Taiwan’s NHI-in-patient claim data from 1997 to 2001. The average cesarean section rate of the fellow obstetricians in the same hospital for the previous month is treated as peer pressure.

RESULTS: After taking into consideration the clinical indications, peer pressure shows a significant positive influence on an obstetrician’s cesarean section decision.

CONCLUSIONS: Whether the same phenomenon holds true for other types of care and for other type of health care system has yet to be explored. Nevertheless, strategies to eliminate its influence are necessary in order to provide a better quality of care.

EQUITY IN THE NATIONAL HEALTH INSURANCE DURING ECONOMIC RECESSION: MISSION IMPOSSIBLE?
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OBJECTIVES: The health care delivery system and personal income are two factors that affect equity in medical care. How deep is the impact of these two factors? We examine the impact of two related factors 1) the implementation of a compulsory National Health Insurance (NHI) program in 1995 and 2) the recession in 2001 on equity in health care finance and utilization in Taiwan.

METHODS: We assumed that Burden of Health