

## Impact of 2015 Korean Cigarette Tax Increase on Lower Income People

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### Introduction

Korea's cigarette tax increase in 2015 was quite conspicuous. The price of cigarette per pack has increased by 80%, from 2,500 won to 4,500 won, the biggest jump in Korean history, in light of the cigarette tax that had not been changed for the past 10 years. As a result, adult smoking prevalence in 2015 was reduced by 1.7% point to 21.6% and male smoking prevalence was reduced by 4.0% point to 38.3% compared to the previous year (Korean Statistical Information Service, KOSIS). At the same time, consumption of cigarette was reduced 33.6% in 2015 (Korean Statistical Information Service, KOSIS).

In terms of smoking prevalence by income group, lower income group has greater smoking prevalence in Korea. Adult smoking prevalence as of 2015 is 23.8% in the lowest income group, 22.2% in the lower-middle-income group, 21.6% in the upper-middle-income group, and is 18.5% in the highest income group. Bobak et al. find reasons of higher smoking prevalence among lower income people in awareness of health consequences of smoking, ways for releasing stress, and opportunity cost of smoking [1]. The poor tends to be careless for smoking caused diseases than the rich, and smoking may play important role for releasing stress than the rich who may have many other alternative ways of releasing stress. Most of all, opportunity cost of smoking caused diseases may be lower for the poor for whom wage forgone may not be great. In fact, numerous literature surveys that smoking prevalence is higher for lower income group in many countries, especially in developing countries [2-8].

This implies that the lower income people bear more of cigarette tax burden. Cigarette taxes are regressive since the tax burden for one pack of cigarette relative to income is greater for lower income people. In addition to that, lower income people smoke more than the higher income people. In fact, the regressive nature of cigarette tax had been a stumbling block on 2 raising cigarette tax in Korea. However, actual burden of cigarette tax surge may have been borne by higher income people, if lower income people are more sensitive to cigarette price changes. Previous researches show that the responsiveness of cigarette consumption and smoking prevalence with respect to price changes are greater for lower income people than for higher income people [9-16]. If lower income people reduce smoking more, cigarette tax may not be regressive in terms of additional tax revenue.

After Korean cigarette price surge in 2015, adult smoking prevalence of the lowest income group in Korea was reduced by 12% from the previous year, while that of the highest income group was reduced by 3% only. During the same period, male smoking prevalence of the lowest income group was reduced by 14%, while that of the highest income group was reduced by 7%. These results confirm that the poorest are more responsive to cigarette price changes, more of the poorest actually quit smoking since the price surge in 2015. Therefore,

additional tax revenue collected from cigarette tax increase may have come from higher income group.

It is still arguable that cigarette tax surge may deprive lower income people of a pleasure from smoking, may drive them toward consuming more of other cheaper addictive goods which may be more harmful for health or may enhance health by helping them to quit smoking and preventing from smoke caused diseases. Some literature examines cigarette tax may affect life styles; alcohol consumption, appetites and weight, and illicit drug use [17-21]. Although these studies show mixed result on the indirect impact of cigarette tax on alcohol consumption and weight gains, etc., cigarette tax may be related to unhealthy life style, and may offset health benefit of cigarette tax increases. In spite of all those arguments, however, public misunderstanding that the additional tax revenues come from the poor may be corrected from Korean experience.

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