

The Impact of Purchasing Pattern after Increasing Cigarette Taxes to National Health Status and Health Insurance in Indonesia

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Keywords: Tobacco smoking, Purchasing pattern, Cigarette taxes, Health status, Health insurance.

Abstract: Tobacco smoking had been an international health issue for many decades. Tobacco kills more than 7 million people each year and more than 1 billion smokers live in low- and middle-income countries. Indonesian has been known as one of the country with lowest cigarette taxes. It leads to a significant decline in health status and an increase the burden of national health insurance. The discourse to raise cigarette taxes in September 2017 later will be an effective solution to reduce the number of smokers in Indonesia and pressing down the purchasing pattern. Using a literature review of several related research and, the result shows that purchasing pattern after increasing cigarette in another country have an impact to national health status and health insurance. Therefore, it is necessary to have a further analysis about the implementation in Indonesia.

1 INTRODUCTION

Tobacco had been used in the early America and significantly increases its popularity by the arrival of Spain to America which also introduced tobacco to the Europeans. The cigarettes shaped tobacco was becoming popularized in the new world by the industrial revolution era (Heckewelder, 2006). A cigarette, or “cigaret”, is a small cylinder tobacco leaves which had finely cut and rolled in thin paper for smoking. Along with the spread, health problems related to the use of cigarettes began to appear (Wigand, 2006).

The literature shows that tobacco kills more than half of its user. Tobacco also kills more than 7 million people each year which more than 6 million of those deaths are the result of direct tobacco use. Moreover, more than 1 billion smokers in the world (80%) live in low and middle-income countries (World Health Organization, 2017). Thus it can be stated that cigarettes have caused a decline in the quality of human health in general. While a deterioration in the quality of health may impose additional burdens on the financing of national health insurance. Accordingly, WHO FCTC (Framework Convention on Tobacco Control) stated that Tobacco use caused serious disability and significantly increases the risk of a number of

additional diseases not immediately linked to it such as tuberculosis (Tobacco-Free Kids, 2017). However, it is the wider economic and development impacts of tobacco that must be better understood.

In Indonesia, there are approximately 57 million active smokers, consist of around 63% men and 5% women. Thus make Indonesia ranked third in the world for total number of smokers. (Tobacco-Free Kids, 2017). Indonesia also known as one of the countries with low cigarettes taxes. Increasing cigarette tax is expected to suppress the purchasing pattern of Indonesian as a solution to improve health quality and ease the burden of national insurance.

2 METHODS

In this research, a systematic literature review for many researches around the world including Indonesia will be used, using a keyword cigarettes purchasing pattern, relation between smoking, health status, health cost and national health insurance. The hypothesis is that there is correlation between cigarette’s purchasing pattern after increasing cigarette taxes to national health status and national insurance.

3 RESULTS

Result compiled from some journal researches related to smoking behaviour, tobacco tax, health status, and health insurance. Table 1 is the research compilation related to cigarettes purchasing pattern.

Table 1: Cigarettes Purchasing Pattern Research

Journal Tittle	Writer and Published Date	Research Method	Result of the Studies
Purchasing Patterns and Smoking Behaviours After a Large Tobacco Tax Increase: A Study of Chinese Americans Living in New York City	Jennifer Cantrell, MPA, DrPH Candidate, March 2008	Cross-sectional study	a. 54.7% of respondents is in at least one tax-avoidance strategy. b. Among the 216 smokers, changes in smoking behaviour in response to the tax increase is reported.
Effects of Tobacco Taxation and Pricing on Smoking Behaviour in High Risk Populations (US) : A Knowledge Synthesis	Pearl Bader, October 2011	Systematic Review, Expert panel	Raising cigarette prices through increased taxes is a more effective tobacco control policy measure for reducing smoking behaviour among youth, young adults, and persons of low socioeconomic status, compared to the general population.
Cigarette Purchasing Patterns Among New York Smokers	Kevin Davis, March 2006	Analytic Method	Smokers in New York are sensitive to higher cigarette prices and reduce the number of cigarettes they smoke when prices are increased.
Raising Cigarette Taxes Reduces Smoking, Especially Among Kids	Ann Boonn, January 2017	Systematic Review	Cigarette consumption from 1970 to 2015 show that there is a strong correlation between increasing prices and decreasing consumption.
Analysis of Product Influence, Price And Promotion To The Result of Purchase of Surya Cigarette (Study At Universitas Kanjuruhan Malang Indonesia)	Dadang Tru Nugroho, 2015	Multiple Linear Regression Analysis	The product variables, prices and promotions simultaneously affect the buying decision.
Cigarette Taxes and Smoking	Kevin Callison, 2014	Synthetic control approach	There is negative, small and significant association between cigarette taxes and either smoking participation or the average number of daily cigarettes.
Promotion, Distribution, Price Influence Against Purchase Decision of Surreal Promild Cigarette : Study in Indonesia	Jilly Bernadette Mandey, 2013	Multiple Linear Regression Analysis	Promotion, distribution, and price have a significant effect on purchasing decision, while price has no significant effect to purchasing decision.

A view study shows that there is correlation between cigarette prices and cigarette taxes with the purchasing pattern of cigarette. Therefor there is some research showing the opposite result of those hypotheses.

Table 2: Smoking and Health Status Research

Journal Tittle	Writer and Date Published	Research Method	Result of the Studies
Self-Rated Health Status and Smoking	Nouran Mahmoud, 2011	Bivariate Analysis	There is significant relationship between self-rated health status and the exposure variables smoking status.
Public Health Implications of Raising the Minimum Age of Legal Access to Tobacco Products	Bonnie et al., 2015	Literature Review	Tobacco use is associated caused mortality with several cases such as lung infections, coronary heart disease, chronic obstructive

Journal Tittle	Writer and Date Published	Research Method	Result of the Studies
			pulmonary disease and a variety of cancers.

The result of the studies shows that there is a correlation or relationship between smoking cigarette and decreasing heath status. Thus, high

cigarette purchasing pattern will affecting smokers heath status.

Table 3: Smoking and National Health Insurance Research

Literature Tittle	Published	Result of the Studies
Tobacco Cost to Economy	WHO, 2013	Tobacco’s cost includes social, welfare and health care spending, higher numbers of accidents and higher insurance premiums.
Info BPJS Kesehatan* ; Dues Adjustment	BPJS, 2015	Raise cigarette taxes and allocate a portion for health financing the community can increase the budget allocation for national health insurance.

* BPJS Kesehatan is Indonesian Health Insurance Program

The result of the studies shows that there is a correlation or relationship between smoking cigarette and burdening national health insurance. Thus, low cigarette purchasing pattern and high cigarette taxes will ease the burden.

proving that the correlation between the two variables is weak and insignificant (Callison & Kaestner, 2014; Mandey, 2013). This may be due to differences in the characteristics of respondents, research area and socio-economic levels. So it can be concluded that increasing cigarette tax in one of effective effort to pressing down cigarettes purchasing pattern in many region including Indonesia.

4 DISCUSSION

Implementation of non-smoking areas in Indonesia, especially in Surabaya has not fully run optimally as a whole. There needs to be firm action in the form of sanctions for those who violate the Regulation of No Smoking Area. Related parties may create promotions or enforce the latest model of tobacco control on Non-Smoking Areas (KTR). Most Indonesians love the latest information with the latest. This will minimize the citizens of Indonesia who consume cigarettes, They gradually follow the process will understand that health is more important and more apply the good tobacco control for us together and encourage the movement of society to create Indonesia free from smoke.

4.1 Purchasing Pattern after Increasing Cigarettes Taxes

Based on the results of literature review studies obtained some research results indicate that there is a significant influence between price increases or cigarette taxes with a decrease in purchases pattern and smoking habits in the society (Bader et al., 2011; Davis et al., 2006; Boonn, 2017; Nugroho et al., 2015). However, view amount of research

4.2 Smoking and Health Status

Some previous research results have illustrated the existence of a negative influence between cigarette consumption and health status, both self-health status and national health status (Mahmoud, 2011; Bonnie et al., 2015). Cigarette illnesses such as coronary heart disease, lung infections, and chronic obstructive pulmonary disease have become one of the leading causes of death in the world. Both for active smokers and second-hand smokers, health problems that appear because the toxic substances in cigarettes are endanger. Hopefully, by decreasing cigarettes purchasing behaviour after increasing cigarettes taxes will reduce the risk of smoking-related diseases in Indonesia

4.3 Smoking and National Health Insurance

Implementation of the national health insurance system in the form of “BPJS Kesehatan” in Indonesia is expected to provide maximum service for the entire community. However, there is some

obstacles in the implementation of Indonesia's national health system, one of them is the operational BPJS Health in 2014 which experienced an imbalance or mismatch in the ratio of claims, due to the outgoing financing greater than the contribution of the incoming premiums up to 103.88% (BPJS Kesehatan, 2015). Therefore it can be predicted that lower cigarettes purchasing pattern will be able to pressing down the cost-economy which related to smoking-related disease. Besides, the higher cigarette tax might be increase the budget allocation to the national health system so as to improve the quality of health service and maintain the health insurance program continuity in Indonesia

5 CONCLUSIONS

Based on the results of several literature reviews related cigarettes purchasing pattern can be concluded that the increase in cigarette taxes may have an impact on the decline of cigarette purchasing pattern, so that will be one of the effective solution to increase the national health status and reduction the burden of national health insurance in Indonesian.

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