Impact of Tobacco Use on Poverty in Indonesia

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Abstract: According to World Health Organization (WHO) data, almost 80 percent from a total of 1 billion smokers globally live in low and moderate income countries. The proportion of tobacco use in the poorest smoker households in Indonesia accounts for almost 12 percent of their incomes (Ahsan, 2009). The paper was carried out to know how tobacco use can lead to poverty in Indonesia. This paper uses descriptive method to collect quantitative data and results show that tobacco use is the third largest expense after food and beverages and grains. Tobacco use also become the largest expenditure on people with medium and low prosperity. The conclusion is that tobacco use has many negative impacts on poverty in Indonesia. The following paper seeks to find more about how tobacco use can impact poverty in Indonesia.

1 INTRODUCTION

According to BPS data for September 2016, the number of poor people (people with per capita expenditure per month below the Poverty Line) in Indonesia decreased to 27.76 million people (10.70%) compared to 28.01 million people (10.86%) in March 2016 (Central Bureau of Statistics, 2017). Based on the area of residence, in the period of March to September 2016 the number of poor people in urban areas increased by 0.15 million people, whereas in the rural areas it decreased by 0.39 million people (Central Bureau of Statistics. 2017). The largest number of poor people by province in September 2016 is East Java with 4.63 million people, while the lowest number of poor people by province in September 2016 is North Kalimantan with 47,030 people (Central Bureau of Statistics. 2017).

Smoking is common, because of its relatively affordable price, widespread and aggressive marketing, lack of knowledge of the dangers and inconsistencies of public policy on tobacco, whereas smoking can cause health, economic, social and environmental burdens (Kosen, 2008; Data and Information Center Ministry of Health, 2015). Smoking can cause various diseases, especially lung cancer, stroke, heart disease and blood vessel disorders, as well as decreased fertility, increased incidence of pregnant out-of-body, fetal (physical and mental growth) slows, seizures in pregnancy, infant immune disorders and increased perinatal death (Kosen, 2008). Based on the results from Riskesdas (2013), smoking behavior of the population 15 years and above did not decrease from 2007 to 2013 and even showed an increase from 34.2 percent in 2007 to 36.3 percent in 2013. In 2013, it was found 64.9 percent of men and 2.1 percent of women were still smoking cigarettes, with 1.4 percent of smokers aged 10-14 years and 9.9 percent of smokers in the unemployed group (Agency for Health Research and Development Ministry of Health, 2013).

2 METHOD

This research uses descriptive analysis method with a quantitative approach. The use of this quantitative descriptive method straightens the research variables that focus on actual problems and phenomena that are currently occurring in the form of meaningful numbers (Shinta, 2013).The data used come from government agencies, such as the Central Bureau of Statistics (BPS). The data already collected will be processed again into data obtained from the results of the indicators of research variables and interpreted in writing by the researchers (Shinta, 2013).

3 RESULTS

Table 1 shows average expenditure (rupiahs) and percentage of monthly average expenditure per capita by commodity group and urban rural classification in March 2016. In the table, cigarettes account for the third largest expenditure after grain.

Table 1: Average Expenditure (Rupiahs) and Percentage Of Monthly Average Expenditure Per Capita By Commodity Group and Urban Rural Classification, March 2016

Commodity Groups	Expenditure (Rupiah)	Percentage (%)
Grains	64,566	6.82
Tubers	5,057	0.53
Fish/shrimp/common squid/shells	33,620	3.55
Meat	20,526	2.17
Eggs and milk	28,025	2.96
Vegetables	34,505	3.65
Legumes	10,349	1.09
Fruits	19,268	2.04
Oil and coconut	12,705	1.34
Beverages	16,019	1.69
Spices	9,166	0.97
Miscellaneous food items	9,443	1.00
Prepared food and beverages	133,834	14.14
Cigarettes	63,555	6.72
Total	460,639	48.8

Source : Susenas Results March 2016, Central Bureau of Statistics

Expenditure quintile can be used to measure the level of welfare or the level distribution of income/expenditure, by sorting the average expenditure per capita from the smallest to the largest, then dividing them equally into five groups of expenditure (Central Bureau of Statistics, 2016). The higher the expenditure quintile, the increasingly prosperous the household (Central Bureau of Statistics, 2016). Table 2 presents the monthly percentage per capita expenditure by food group and expenditure quintile.

Table 2: Monthly Percentage Per Capita Expenditure By Food Group And Expenditure Quintile, March 2016

Commodity Groups	First	Second	Third	Fourth	Fifth	Total
Grains	25.94	20.02	16.69	13.13	8.54	14.02
Tubers	1.29	1.09	1.00	1.29	0.98	1.10
Fish/shrimp/common squid/shells	6.57	7.09	7.57	7.60	7.22	7.30
Meat	1.97	2.68	3.41	4.36	6.18	4.46
Eggs and milk	4.19	4.80	5.32	6.05	7.34	6.08
Vegetables	9.09	8.70	8.31	7.75	6.16	7.49
Legumes	3.19	2.77	2.43	2.27	1.75	2.25
Fruits	2.33	2.84	3.37	4.08	5.52	4.18
Oil and coconut	3.78	3.41	3.12	2.81	2.10	2.75
Beverages	4.64	4.16	3.89	3.53	2.75	3.48
Spices	2.48	2.33	2.23	2.04	1.62	1.99
Miscellaneous food items	2.28	2.27	2.24	2.14	1.77	2.05
Prepared food and beverages	19.32	22.68	24.31	27.83	36.47	29.05
Cigarettes	12.94	15.16	16.11	15.12	11.60	13.80
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Susenas Results March 2016, Central Bureau of Statistics

Generally, tobacco-related illnesses take a long time (15-20 years) to manifest after the smoking behavior begins, so that the epidemic of tobacco-related diseases and the number of deaths in the future may continue to increase (Tobacco Control Support Center – IAKMI, 2014). Table 3 shows the total cost of treatment of diseases related to tobacco use in Indonesia in 2013.

Table 3: Total Cost of Treatment of Diseases Related to Tobacco Use, Indonesia 2013

Disease	Total cases	Cost per episode	Total cost in 2013
Low Birth Weight babies	216,050	6,185,362	1,336,347,460,100
Neoplasm of Mouth and Throat	6,670	3,733,141	24,900,050,470
Neoplasm of Esophagus	1,710	3,733,141	6,383,671,110

Disease	Total cases	Cost per episode	Total cost in 2013
Neoplasm of Stomach	10,440	3,733,141	38,973,992,040
Neoplasm of Liver	13,400	3,733,141	50,024,089,400
Neoplasm of Pancreas	2,910	3,733,141	10,863,440
Neoplasm of Lung, Bronchus and Trachea	54,300	3,733,141	202,709,556,300
Neoplasm of Cervix	28,940	3,733,141	108,037,100,540
Neoplasm of Ovary	7,690	3,733,141	28,707,854,290
Neoplasm of Gall Bladder	10,160	3,733,141	37,928,712,560
Coronary Heart Disease	183,950	6,017,579	1,106,933,657,050
Cerebrovascular Disease/Stroke	144,780	7,726,946	1,118,707,241,880
Chronic Obstructive Pulmonary Disease	284,310	4,551,951	1,294,165,188,810
Total			5,353,829,437,990

Source: Tobacco Control Support Center – IAKMI, 2014)

Every year in the state budget of revenues and expenditure (APBN), the Government tends to target cigarette excise taxes revenue to rise by reason of reducing tobacco consumption in the community. Chart 1 shows government revenue from cigarette excise in 2010-2016.
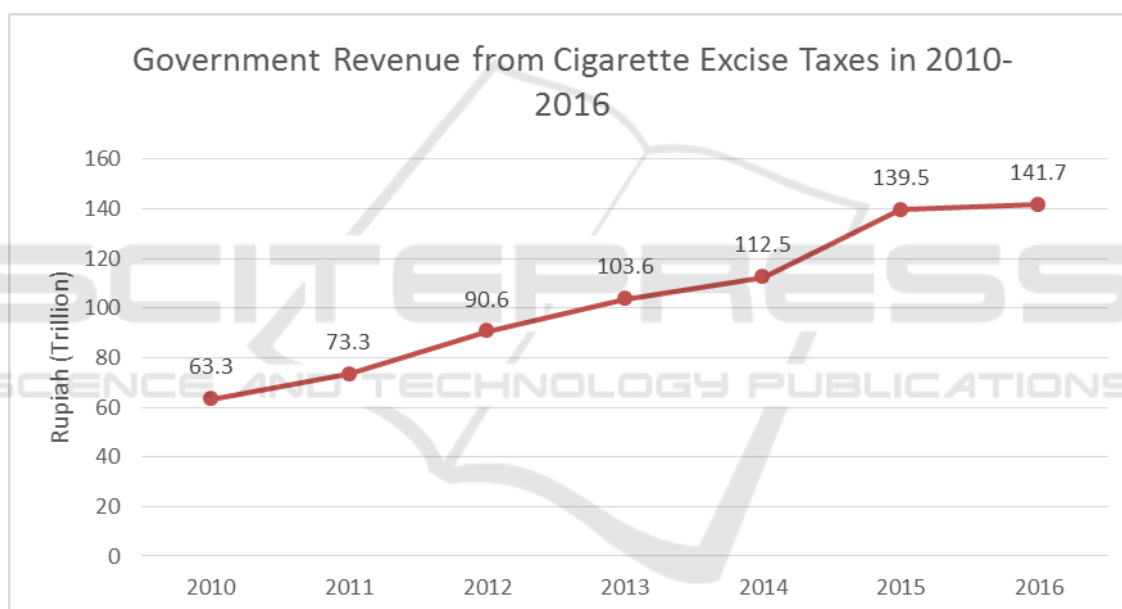

Figure 1: Government Revenue from Cigarettes Excise Taxes in 2010 – 2016

4 DISCUSSION

Based on Table 1, cigarettes account for the third largest expense after food and beverages and grains. This shows that the people of Indonesia prefer to buy cigarettes than foods such as meat, vegetables and fruits. Tobacco use causes unnecessary and actually preventable diseases, even worsening the welfare of the poor and increasing the burden of the country's economy.

Table 2 shows the highest expenditure of cigarettes in the third expenditure quintile (medium prosperity), while the lowest expenditure of cigarettes is in the fifth (high prosperity) expenditure quintile. People with medium to low expenditure tend to spend more money on cigarettes than on food. When the Poverty Line increases it increases cigarette consumption (Sari, 2016). This can happen because of the strong nicotine content in cigarettes so that the addiction leads to continued smoking and which is difficult to prevent.

Table 3 explains that the cost of treatment for diseases caused by tobacco use is high. Estimated data may be missed as the greater the use of tobacco,

the higher the cost of treatment. Therefore, the money that could have gone to buy other purposes is used to fund the cost of treatment of diseases caused by tobacco use. It can be estimated that the cost of treatment for diseases caused by tobacco use can account for all BPJS funds. According to WHO, there is association between tobacco-related illness and low-income level, especially for all-cause mortality, lung cancer, low birth weight for gestational age.

Table 4 shows that cigarette taxes received by the Government are constantly increasing. However, the number of smokers in Indonesia is still not reduced, and has even tended to increase because of the ease by which the people of Indonesia can obtain cigarettes wherever and whenever. The amount of received cigarette excise taxes revenue is still not comparable with the impact of smoking due to economic, health, social and environmental impacts. According to Sari (2016), there is a significant association between cigarette consumption and Poverty Line. Although there has been a cigarette tax, the cigarette consumption continues to increase.

5 CONCLUSIONS

Based on the research result, tobacco use has a significant impact on the expense of medium and low prosperity. In addition, the use of tobacco also reduces financing for more important uses, such as education, health and food. Although every year the cigarette excise taxes target and revenue always increasing, it's not enough to reduce amount of smokers in Indonesia. It requires effort by the Government and the people themselves to reduce tobacco use, such as the adoption of FCTC policies that have been shown to reduce the degree of tobacco use and the promotion of healthy lifestyles to improve public health status.

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