



THE ROLE OF PARENTS ON TEENAGERS SMOKING BEHAVIOR IN PRESSING FAMILY EXPENDITURE BUDGET IN NATIONAL SCALE

Lucky Herawati, Health Polytechnic of Health Ministry of Yogyakarta, Indonesia

Jenita D.T Donsu, Health Polytechnic of Health Ministry of Yogyakarta, Indonesia

ABSTRACT

The prevalence of adolescent smokers increases from year to year. Most of the smokers come from low income families. Giving the role of the parent as an educator, both for those who smoke and those who do not smoke has a positive impact on adolescent smoking behavior, among others, it decreases the number of cigarettes smoked per day. Until now it is not known how much funds can be saved in the family as a positive impact of the role of parents as educators for their teenagers. This research is a descriptive study that aims to provide an overview of the amount of family funds that can be saved for cigarette shopping for young smokers. The results show that giving the role of parents to both smokers and non-smokers as educators can reduce family funds for shopping for cigarettes for teenagers. Non-smoking parents as educators can save family funds for shopping for cigarettes for teenagers is greater than for smokers.

Keywords: parents, cigarette shopping, teenagers

Background

According to the National Narcotics Agency, there are three major problems that threaten the future of adolescents, namely smoking, drinking alcohol and drug abuse. Smoking behavior is the entrance and has a relatively higher ratio between alcohol drinking behavior and drug use (Kasapoglu and Ozerkmen, 2008). Data on smoking behavior of adolescents aged 12-15 years increases from year to year. In 2012, the percentage of adolescents aged 14-15 years (equivalent to class 8-9 junior high school) in some state junior high schools in Bantul Regency was 38.6% (Astuti K, 2012), in 2015 the percentage of adolescents aged 14-15 years (equivalent to 8th grade of junior high school) in one of the state junior high schools in Jayapura was 56.52% (Herawati et al., 2017a), and in 2016 out of 649 8th grade students in 10 Public Middle Schools in Yogyakarta, Denpasar, and Banjarmasin amounting to 55.78% (Herawati et al., 2017). The magnitude of the number of adolescent smoking behaviors including smoking behavior "trial and error."

The negative effects of smoking on adolescents include health, social and economic impacts. Health effects in the form of smoking-related illnesses in the self, family and environment. Teenage smokers in general also have the potential to be predictors of a number of other social problems, namely dropping out of school, unhealthy sexual behavior and juvenile delinquency (National Narcotics Agency of the Republic Indonesia, 2009). Lately, fights between groups of teenagers allegedly have drug transactions behind the marriage. Economic impacts, namely fulfillment of cigarettes and health costs when they are sick (Herawati, 2018). In relation to the socio-economic family, the results showed that there was a negative association between the smoking behavior of adolescents and the socioeconomic status of parents. More teenagers who smoke from low income families compared to high income. Families with low economic status, who have teenagers who smoke, will get a double burden. First, the family will get a negative impact as passive smokers, who have the potential to get serious health problems. Secondly, families with low income economic status and must provide funds to shop cigarettes for their teenagers. It is not uncommon for families to put aside basic needs for the fulfillment of cigarette shopping for their teenagers. Research shows that adolescents from low income families who get weekly allowances from their parents are actually used for shopping for cigarettes (West, Sweeting, and Young, 2007).

Government efforts in controlling smoking behavior in adolescents are indicated by the policy of "smoke-free schools". Specifically in the health sector, it was demonstrated by the Ministry of Health's Healthy Living Behavior Movement campaign which received full support from the President R.I as stated in Presidential Instruction No. 1 of 2017 (Ministry of Health of the Republic Indonesia, 2016)(Ministry of Health of the Republic Indonesia, 2017). The biggest risk factor that can be prevented from morbidity and mortality in developed countries where at least one in four teenagers to adulthood is smoking (Binder, 2010).

Scientists are also looking for a breakthrough to control the teenager's smoking behavior. Recent research focuses on 2 (two) environments that directly influence the smoking behavior of teenagers, namely parents and friends (Binder, 2010). In line with the statement, (Kasapoglu and Ozerkmen, 2008) also states that adolescents are in a risky environment, namely in the family and in school. Families are classified as risky environments because they comply. Parental smoking behavior is one of the factors that significantly influence adolescent smoking behavior (Gwon, 2016). Another factor is the identification of individuals who are prone to smoking, which is an important determinant in efforts to reduce the prevalence of smoking in the future.

Lucky (2017) capture the "potential of parents who smoke" that can be utilized to influence the behavior of their teenagers (Herawati et al., 2017). Lucky et al (2017) research in the title of the article "Parent educator for teenager's smoking behavior" produces information that parents, both smoking and non-smokers, after being given additional knowledge of "smoking and danger", can increase their teenagers' knowledge and can reduce number of cigarettes smoked a day. However, the study has not provided information on how much funds (Rupiah) can be saved from the utilization of parents as educators for teenagers. This study aims to obtain information on the amount of funds (Rupiah) that can be saved by the family after adolescents' smokers get treatment/attention from their parents both those who smoke and those who are not smokers.

Method

The design of this study was descriptive, which provided an illustration of the amount of funds (Rupiah) saved by families for spending cigarettes for teenage children, by converting decreases in the number of cigarettes smoked by teenagers per days of research (Lucky et al., 2017) into rupiah. To get the price per cigarette unit, a cigarette price survey was conducted online in July 2018. The cigarette unit price obtained did not distinguish whether it was a filter cigarette or not. The variable described is the amount of family funds that can be saved on a family scale and on a national scale. Data analysis was carried out descriptively by using frequency tables.

Results and Discussion

Previous research (Lucky et al., 2017) yielded information that there was a significant effect on the use of parents as educators who smoked (X_1) and non-smokers (X_2) on adolescent smoking behavior. The parents were given additional knowledge about smoking and its dangers. Then, they were asked to communicate with their teenage children for 2 months. Communication between parents and adolescents is done at home in the form of: giving a message away from close friends who smoke, giving information about the dangers of smoking, reminding them to reduce the number of cigarettes they smoke per day, and recommending quitting smoking.

The description of the results of previous studies that have a connection with the purpose of this study is the large decrease in the number of cigarettes smoked per day by regular smokers. Although it did not show a significant difference between the treatment of parents of smokers (X_1) and non-smokers (X_2) in reducing the number of cigarettes smoked by teenage children per day, the data in the two treatment groups could be used to fulfill the purpose of this study. More can be seen in the following table.

Table 1. Average number of cigarettes smoked by teenagers per day before and after treatment, in the group of smokers (X_1) and non-smoking parents (X_2)

Group	Pretest	Posttest	Difference	p value ^a
	Mean±SD (stem)	Mean±SD (stem)	Mean±SD (stem)	
Parental smoking educator (X_1), n1=22	3.64±3.2	2.64±2.9	1.0±2.4	0.186*
Parental nonsmoking educator (X_2), n2=15	4.40±4.1	2.0±2.03	2.4±3.8	

^a Independent T test

*Level of significant 0.05

Source: Research results Lucky (2017)

To convert the decrease in the number of cigarettes into Rupiah, a cigarette price survey was conducted in the Indonesian market in July 2018. The results can be seen in Table 2.

Table 2. Price List of Various Brands of Cigarettes in Indonesia

Cigarette Brand	Price per pack (Rp)	Price per stem (Rp)
1. GG Kretek “m” isi 12	12.000,-	1.000,-
2. DSS isi 12	15.000,-	1.250,-
3. GGS isi 16	21.000,-	1.312,5
4. GGSP isi 16	15.000,-	0. 937,5
5. ML isi 20	25.000,-	1.250,-
6. WS isi 12	14.500,-	1.208,-
7. JS isi 16	20.000,-	1.250,-
8. JS isi 12	15.000,-	1.250,-
9. MG Filter isi 16	13.000,-	0. 812,5
10. SM filter isi 16	24.000,-	1.500,-
11. DP filter isi 12	14.500,-	1.208,-
12. UB filter isi 12	14.000,-	1.166,-
Mean		1.178,- or 1.200,-

The data in Table 2 shows that the average price of a cigarette is Rp 1,200 (one thousand rupiahs). There is no distinction between filter cigarettes and not filters. Based on the unit data of a cigarette (Table 2), the amount of the decrease in family funds for shopping for cigarettes for teenage children can be calculated. More can be seen in Table 3.

Table 3. Savings of Family Funds (Rupiah) for Cigarette Shopping

Group	Expenditures before intervention (Rupiah) per person			Expenditures after intervention (Rupiah) per person			Savings for Cigarette (Rupiah) Expenditures per person		
	Per day	Per month	Per year	Per day	Per month	Per year	Per day	Per month	Per Year
X ₁	4.368,	131.040,	1.572.480,	3.168,	95.040,	1.140.480,	1.200	36.000,-	0.432.000
X ₂	5.280	158.400,	1.900.800,	2.400,	72.000,	864.000,-	2.880	86.400,-	1.036.800

X₁=Parental smoking educator;

X₂= Parental nonsmoking educator

Table 3 shows that the treatment by utilizing non-smoking parents (X₂) as educators for teenagers, can save family funds of Rp. 2,880 (two thousand eight hundred eighty rupiah) per day and Rp. 1,036,800 (One million thirty-six thousand, eight hundred rupiahs per year, if there is a teenager in the family there is a smoker. The data in Table 3 shows that the utilization of non-smoking parents (X₂) is greater in the ability to reduce family funds for shopping for cigarettes than the utilization of smoker parents (X₁)

If we use the basic price of a cigarette of Rp. 1,200, then the amount of savings for family expenditure can save family expenditure of Rp. 432,000 - Rp. 1,036,800 per year. If we assume that the results of this study apply to adolescents aged 14-15 years (equivalent to 8th grade middle school) in Indonesia with an estimated 100 million people, the role of parents, both parental smoking and nonsmoking as educators for 2 months, can save state funds for shopping for cigarettes amounting to Rp. 43,200,000 million, - (Rp. 43.2 billion) up to Rp. 103,680,000 million (Rp. 103,680 billion) in a year.

The results of research on Scottish adolescents by Patrick (2007) show that adolescents have total income per week. Adolescents aged 11, 13, and 15 years have income of 2 Ponds (equivalent to Rp. 36,800) per week, 5 Ponds (equivalent to Rp. 92,000) per week, and 10 Ponds (equivalent to Rp. 184,000) per week Sunday. Though most of the sources of income come from parents as pocket money (West, Sweeting and Young, 2007). Thus, family income is partly used to meet the needs of cigarette teenagers in Scotland. Adolescents who come from families with low income (\leq \$ 20,000 / year or equivalent to Rp. 280 million per year) tend to be 30% more likely to be adolescent smokers than families with higher income (\$ 20,000 per year - \$ 30,000 per year) (Soteriades and DiFranza, 2003). In other words, poor families tend to have teenagers who smoke compared to high income families. Poor families get double losses, which has a higher probability of getting teenagers who smoke and have to spend more money to meet the needs of cigarettes for their teenagers.

The description of the results of research in Scotland and Massachusetts above shows that giving roles to parents (smokers and non-smokers) can reduce the burden on the family in meeting the needs of their teenagers' cigarettes. Support from health workers is very much needed to foster and monitor parents so that they continue to carry out their role as educators in order to reduce the status of adolescent smoking behavior, reduce the number of cigarettes smoked per day and save family and state expenditure, in addition to reducing negative impacts on adolescents and their environment.

Conclusion

The role of parents (smoking or non-smokers) can be used as an educator in adolescents to control the smoking behavior of teenagers and save family funds for shopping for cigarettes for teenagers

References

- Astuti, K. (2012). Overview of Smoking Behavior in Adolescents in Bantul Regency. *Insight*, 10(1), 77-87.
- Binder, J. (2010). Adolescent Alcohol Use in Relationship to Parental Perceptions on Underage Drinking: A Literature Review. *University of Wisconsin-Stout Research Paper*.
- Gwon, S. H., & Jeong, S. (2016). Factors influencing adolescent lifetime smoking and current smoking in South Korea: using data from the 10th (2014) Korea Youth Risk Behavior Web-Based Survey. *Journal of Korean Academy of Nursing*, 46(4), 552-561.
- Herawati, L. (2018). *Inaugural speech: The role of public health education in realizing a healthy family, a strong nation* (translated from Indonesian: *Pidato Pengukuhan: Peran pendidikan kesehatan masyarakat dalam mewujudkan keluarga sehat, bangsa kuat*). Jakarta.
- Herawati, L., Budiman, J. A., Haryono, W., & Mulyani, W. (2017a). Jayapura teenagers smoking behavior. *Journal of community health*, 42(1), 78-82.
- Herawati, L., Budiman, J. A., Hadi, C., & Khair, A. (2017b). Parent educators for teenage smoking behavior. *International journal of adolescent medicine and health*, 42(1).
- Kasapoglu, A., & Ozerkmen, N. (2008). Predictors of adolescent cigarette smoking behavior: A sociological case study in Ankara, Turkey. *Journal of Child & Adolescent Substance Abuse*, 17(4), 115-132. <http://doi.org/10.1080/15470650802292947>
- Ministry of Health of the Republic Indonesia. (2016). *The government is touting healthy life society movement (GERMAS)* (translated from Indonesian: *Pemerintah canangkan Gerakan Masyarakat Hidup Sehat (GERMAS)*). Retrieved from <http://www.depkes.go.id/article/view/16111600003/pemerintah-canangkan-gerakan-masyarakat-hidup-sehat-germas-html>

- Ministry of Health of the Republic Indonesia. (2017). GERMAS. In *GERMAS News*. Jakarta.
- National Narcotics Agency of the Republic Indonesia (Badan Narkotika Nasional). (2009). *Prevention of drug abuse* (translated from Indonesian: Pencegahan penyalahgunaan narkoba). Jakarta: Psta Pencegahan Lakhar.
- Soteriades, E. S., & DiFranza, J. R. (2003). Parent's socioeconomic status, adolescents' disposable income, and adolescents' smoking status in Massachusetts. *American Journal of Public Health*, 93(7), 1155-1160.
- West, P., Sweeting, H., & Young, R. (2007). Smoking in Scottish youths: personal income, parental social class and the cost of smoking. *Tobacco control*, 16(5), 329-335.