

PETUGAS PENGAWAS PEROKOK (P3) METHOD AS COMMUNITY EMPOWERMENT MODEL'S TO INCREASE KNOWLEDGE, ATTITUDE, AND BEHAVIOR ACTIVE SMOKER

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Abstract: Cigarette is the dangerous thing for health because very toxic, dangerous, and addictive. Based on a survey in the Antasan Senior Village, the number of active smokers reached 74, 84%. One of the efforts is created a method with direct mentoring for active smokers called petugas pengawas perokok method. A research is needed to explain the difference level knowledge, attitude, and behavior in smokers before and after the application of petugas pengawas perokok method. This study was analyzed using quantitative methods with pre- and post-test design through pre-experimental approach. The population of this study was 595 families, sample were 88 respondents was determined using Slovin formula. Instrument of this research using questionnaires and blanko stuffing. Treatment variables were petugas pengawas perokok method, while the dependent variable was level of knowledge, attitude, and behavior. The result showed before the implemented of petugas pengawas perokok method 57 respondents (64,8%) has a good knowledge, 57 respondents (64,8%) has a good attitude, 52 respondents (59,1%) has a good behavior. After the the implemented of petugas pengawas perokok method 72 respondents (81,8%) has a good knowledge, 65 respondents (73,9%) has a good attitude, 56 respondents (63,6%) has a good behavior. Based on Mc Nemar test, obtained the result there are differences level knowledge ($p=0,000$) and attitude ($p=0,008$) and there are no differences behavior ($p=0,219$) before and after implemented petugas pengawas perokok method. Needed more research to know effectiveness this method with more respondents, wider area, and more time.

Keywords: level of knowledge, attitude, behavior, smoker, petugas pengawas perokok method

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INTRODUCTION

Cigarette is the dangerous thing for health because of a cigarette contain a chemical compounds that very addictive, dangerous, and toxic.¹ According to the survey results of the *World Health Organization* [WHO] in 2008, one third of the world's population were smokers with 57% male and 43% female. One in ten deaths in the world caused by cigarettes and every 6 seconds there was a smoking-related mortality.² In 2030 an estimated mortality of smokers in the world will reach 10 million.³

In Indonesia, the number of cigarette consumption occupied fifth highest in the world, amounting to 215 billion cigarettes. In detail, the results of the Global Adult Tobacco Survey [GATS] in 2011 showed that 67% of men and 2.7% women, or 34.8% of the population were active smokers with 29.2% smoked daily.⁴ While the views of the Global Youth Tobacco Survey [GYTS] 41% of teenagers in Indonesia were active smokers. According the research from Trisnawanti [2012] the exposure of cigarette smoke will affect the incidence of respiratory infection in toddlers. The result of Riskesdas 2010 showed that the handling of cases of respiratory infection in toddlers still far from the target. This is shown by the data of cases of pneumonia in toddlers who recently handled 25.5% of the 66.702 cases.⁵

Riset Kesehatan Dasar (Riskesdas) 2013 showed the prevalence of people aged ≥ 15 years who consume tobacco snuff and chewing was 35%.⁶ In Banjar District, 54.84% of the population still consume cigarettes in the house.⁷ Based on the results of a preliminary survey in the Antasan Senor Village in 2014, shows the prevalence of active smokers was quite high reached 74.84%. Factors that influence smoking behavior include biological, psychological, environmental, socio-cultural and community knowledge was still low.⁸

One of the efforts for the problems above were mentoring towards active smokers to improve the knowledge, attitudes, and behaviors by taken the concept PMO in TB patients with PMO were family members who live at the same home.⁹ Based on research from Istiawan R et al [2006], showed a strong correlation between the positive and patterned with the PMO's role in the prevention of client behavior tuberculosis.¹⁰ This is in line with the research by Budiman et al [2013] that the PMO has amounted to 73.1% role in improving patient adherence treatment and prevention of infection.¹¹ Based on the background above, the objection of this research was to knew differences in the level of knowledge, attitudes, and behaviors in smokers before and after the application "petugas pengawas perokok method" in Antasan Senor Village.

METHODS

This research was analyzed using quantitative methods with pre-and post-test design through pre-experimental approach. The population in this study was families which is one of the members of the family were active smokers in the Antasan Senior village, which amounted to as much as 595 families. Sample was determined using slovin formula as follows:

$$n = \frac{N}{N.(d)^2 + 1}$$

$$n = \frac{595}{595(0.1)^2 + 1}$$

$$n = 85,61 \approx 86$$

The sampling technique based on the inclusion criteria. Inclusion criteria were common characteristics of the study subjects from a population to be studied. Inclusion criteria that used were:

1. The respondents were in the age range 20-45 years.
2. A community of Antasan Senior village
3. Physically and mentally healthy.
4. Willing to become respondents.

Thus, samples taken in this study is the minimum number as much as 86 families and samples obtained in the field as much as 88 families.

Instrument of this research used questionnaires and blanko stuffing. The questionnaire used there are 2 kinds, namely a questionnaire relating to the characteristics of respondents and a questionnaire related to the knowledge, attitudes, and behavior of respondents. While the blanko stuffing is used to measure the amount of daily cigarette consumption. The independent variables were used as treatment in this research were "petugas pengawas perokok" method and dependent variable were the knowledge, attitudes, and behaviors.

RESULTS AND DISCUSSION

A. Univariate Analysis

1. The level of knowledge before and after the implemented "petugas pengawas perokok" method

The frequency distribution of the level of knowledge before and after the implemented "petugas pengawas perokok" method presented in Table 1.

Table 1.
Frequency distribution of the level of knowledge before and after the implemented
“petugas pengawas perokok” method in Antasan Senior village

Category	Level of Knowledge			
	Before		After	
	<i>n</i>	%	<i>n</i>	%
Kurang	31	35,2	16	18,2
Baik	57	64,8	72	81,8
Total	88	100	88	100

Based on Table 1 it can be seen that before the implemented of petugas pengawas perokok (P3) as much as 31 respondent (35,2%) had a less knowledge and after the implemented petugas pengawas perokok method respondents that had less knowledge become into 16 respondents (18,2%), So it can be known based on a comparison the level of knowledge before and after the implemented P3 method the number of respondents that having less knowledge declining by 17%.

2. The Attitude before and after the implemented “petugas pengawas perokok” method

The frequency distribution of the attitude before and after the implemented “petugas pengawas perokok” method presented in Table 2.

Table 2
Frequency distribution of the attitude before and after the implemented
“petugas pengawas perokok” method in Antasan Senior village

Kategori	Attitude			
	Before		After	
	<i>n</i>	%	<i>n</i>	%
Kurang	31	35,2	23	26,1
Baik	57	64,8	65	73,9
Total	88	100	88	100

Based on Table 2 it can be seen that before the implemented of petugas pengawas perokok (P3) as much as 31 respondent (35,2%) had a less attitude and after the implemented petugas pengawas perokok method respondents that had less knowledge become into 23 respondents (26,1%), So it can be known based on a comparison the attitude before and after the implemented P3 method the number of respondents that having less attitude declining by 9,1%.

3. The behavior before and after the implemented “petugas pengawas perokok” method

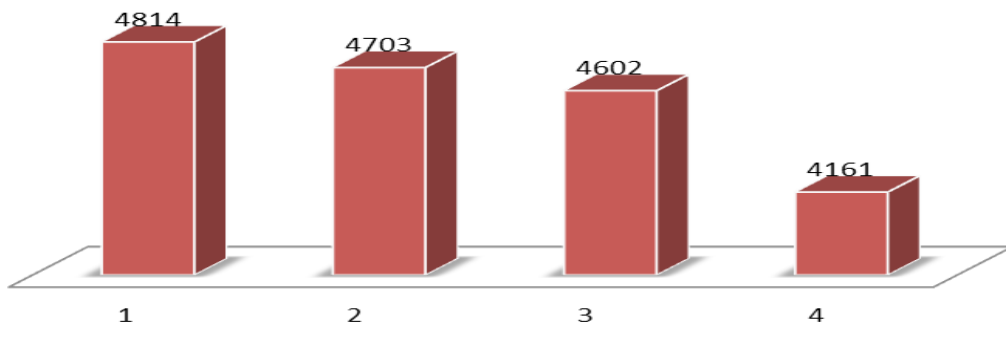
The frequency distribution of the behavior before and after the implemented “petugas pengawas perokok” method presented in Table 3.

Table 3
Frequency distribution of the behavior before and after the implemented “petugas pengawas perokok” method in Antasan Senor village

Category	Behavior			
	Before		After	
	<i>n</i>	%	<i>n</i>	%
Kurang	36	40,9	32	36,4
Baik	52	59,1	56	63,6
Total	88	100	88	100

Based on Table 3 it can be seen that before the implemented of petugas pengawas perokok (P3) as much as 36 respondent (40,9%) had a less attitude and after the implemented petugas pengawas perokok method respondents that had less knowledge become into 32 respondents (36,4%), So it can be known based on a comparison the attitude before and after the implemented P3 method the number of respondents that having less behavior declining by 4,5%.

Jumlah Konsumsi Rokok



Within 1 months of daily cigarette consumption respondents recorded by filling in the blanko stuffing. Total consumption of cigarettes being recorded every

day and will describe the direction of change in the behavior of the respondent. In the first week total number of cigarette consumption as much as 4814 rods. In the second week total number of cigarette consumption as much as 4703 rods, in the third week as much as 4602 rods, and last week as much as 4.161 rods. The lowest amount of cigarette consumption is as much as 0 rods indicated by 3 respondents.

Respondents who stop smoking have a reason that they quit smoking because it is experiencing health problems, especially disorders of the lungs that characterized by cough and pain in the chest. Smokers can experience health problems such as narrowing of the arteries, high blood pressure, heart, lungs, chronic bronchitis, and others. Seeing the impact caused by smoking sooner or later, the smoking behavior must be stopped. Although too difficult to stop smoking behavior, but when someone has suffered from health problems they began to have a desire to stop smoking. Based on the results of research by Ardini (2012), showed that one of the reasons study participants quit smoking was because of a medical condition that lung disorders. Participants also expressed quit smoking because they want to be cured of the disease. In addition, the involvement of families through support and motivation with many give advice to participants if they want to smoke again also be a boost to quit smoking.

B. Bivariate Analysis

1. The difference level of knowledge before and after the implemented “petugas pengawas perokok” method

The difference between the level of knowledge before and after the implemented “petugas pengawas perokok” method can be seen in Table 4.

Tabel 4
The difference level of knowledge before and after the implemented “petugas pengawas perokok” method

<i>Before</i>	<i>After</i>		<i>Total</i>	<i>p-value</i>
	<i>Good</i>	<i>Less</i>		
Good	16	15	31	0,000
Less	0	57	57	
Total	16	72	88	

Based on table 4 it can be seen that there were differences in the level of knowledge of smokers before and after the implemented “petugas pengawas perokok” method ($p\text{-value} = 0.000$).

According Notoatmodjo (2007), knowledge is the result of human senses or the results of assessment to the object through the senses owned.¹² Most human knowledge gained through education, experience of themselves or others, and the environment.¹³ In practice, to improve the knowledge “petugas pengawas perokok” has a duty to always provide health education about smoking, the dangers of smoking, and so on. From the analysis of pretest and post-test on research conducted by Mariyam and Nuradita (2013) found that from 56 respondents as many as 33 respondents (58.9%) were increase in knowledge after being given health education.¹⁴ In addition, the experience of ourselves and others can also increase the knowledge. A smoker who has suffered health problems from smoking or see someone impaired health due to smoking in the end came to knew what the dangers posed by smoking so that they want to reduce smoking behavior.

“Petugas pengawas perokok” method which is a model of mentoring through the family from active smokers may be an alternative to improve the knowledge of smokers. Based on the results of research conducted Aswita (2008), models of mentoring was done for 3 months can significantly improve the knowledge.¹⁵ According to Vitale (2010) in the European Journal of Public Health that current pharmacological treatments for smokers to pay that much. Therefore, it is necessary to establish a program one of which is the mentoring program. A continuous assistance to cigarette smoke can affect a person’s behavior and may be a step in the process of quitting smoking.¹⁶ Increased knowledge can give effect to its habits. This was in line with research conducted by Alam (2009) that was based on the results of statistical analysis showed a significant relationship between the respondents’ knowledge with smoking habits of respondents ($p = 0.001$)¹⁷

2. The difference attitude before and after the implemented “petugas pengawas perokok” method

The difference between attitude before and after the implemented “petugas pengawas perokok” method can be seen in Table 5.

Tabel 5
The difference attitude before and after the implemented “petugas pengawas perokok” method

<i>Before</i>	<i>After</i>		<i>Total</i>	<i>p-value</i>
	<i>Good</i>	<i>Less</i>		
Good	23	8	31	0,008
Less	0	57	57	
Total	23	65	88	

Based on table 5 it can be seen that there were differences in the attitude of smokers before and after the implemented “petugas pengawas perokok” method (p -value= 0.008).

Attitude is covered person’s response to a particular stimulus or object, which already involves a factor of opinions and emotions were concerned.¹⁸ Attitude is a form of psychological state that was not simply formed or still same. Attitude change according to the stimulus that influence. In this case, “petugas pengawas perokok” provide stimulus in the form of health information so that smokers have a good understanding of which can serve as the basis for a change in attitude.¹⁹

Efforts to increase positive attitudes in active smokers, then applied “petugas pengawas perokok” method through direct monitoring by the next of family to the active smoker. The family as the nearest person was expected to create awareness and provide motivation. In this case the active smoker through his family will be given a proper understanding of the dangers of smoking and the benefits of quitting smoking. It was expected to be able to awaken their desire to behave in a healthy life where this activity was done repeatedly so expect arise the motivation to change the attitudes of smokers and smoking behavior. This was supported by research conducted by Rahayu (2010) that the extension by using the method of mentoring can improve attitudes and smoking cessation scale scores and can be used as a method to provide the motivation to quit smoking.¹⁹

According to Ferrante and Ledda (2013) if there was someone who accompany smokers, both families or health care workers can be a way to overcome tobacco dependence, and can encourage someone in reduced smoking behavior.²⁰ Action is something that is done based on its knowledge and attitude. By having a positive attitude is expected to reduce smoking behavior. This is in line with research conducted Anto and Umboh (2009) that there was a relationship between attitudes to the act of smoking (p -value = 0.007), which means the better the attitude, the less likely a person to smoke.²¹

3. The difference behavior before and after the implemented “petugas pengawas perokok” method

The difference between behavior before and after the implemented “petugas pengawas perokok” method can be seen in Table 6.

Based on table 6 it can be seen that there were not differences in the behavior of smokers before and after the implemented “petugas pengawas perokok” method (p -value= 0.219).

Smoking behavior of a person can not be separated from knowledge, perception or value that was believed to be affecting a person’s personality iwas influenced by internal and external factors.²² The study conducted by a team of Gadjah Mada

University in 2001 in Central Java demonstrate the success of counseling without of pharmacological therapy is 17%. The success rate was usually calculated for 3 months, 6 months and 1 year after the intervention.²³ Based on the theory of the World Health Organization in Geneva module entitled Encouraging people to Stop Smoking stated that adequate attention from the people closest to smokers and routinely given information can encourage a person to reduce or quit smoking.²⁴ The success of behavioral changes can also be observed within a period of 3 months, with a view toward change a person’s behavior is positive or negative.²⁵ Based on the recapitulation of cigarettes for 3 months can be concluded that a change in behavior towards a positive direction which is characterized by a reduction in the number of cigarettes consumed daily respondents.

Tabel 6
The difference behavior before and after the implemented “petugas pengawas perokok” method

<i>Before</i>	<i>After</i>		<i>Total</i>	<i>p-value</i>
	<i>Good</i>	<i>Less</i>		
Good	31	5	36	
Less	1	51	52	0,219
Total	32	56	88	

Statistical analysis showed that there was no difference in behavior before and after the implemented “petugas pengawas perokok” method. Although the direction of changes in behavior seen from the number of cigarettes consumed per day showed a positive direction in which the number of cigarette consumption has decreased every month and there are 2 people who quit smoking respondents. Behavioral approach to counseling or with the provision of knowledge in smokers give 2 choices, stop immediately (cold turkey) or stop gradually through the gradual reduction of the number of cigarettes smoked and delay the onset of smoking every day.²³

Respondents largely admitted it was difficult to quit smoking. Judging from the biological aspects of the difficulty of stopping smoking because of the influence of nicotine smoke inhalation along very addictive. This dependence is perceived as a pleasure that gives psychological satisfaction and this phenomenon can be explained from the concept of tobacco dependency (dependency cigarettes). Nicotine is one of the 4000 chemical compounds contained in cigarettes and will reach the central nervous system in the brain within 2 seconds after someone smoking cigarettes. Nicotine reaches the brain gets stuck on brain receptors called

alpha 4 beta 2, which stimulates the release of nerve transmitter and release of dopamine which will provide physiological effects such as feeling of pleasure and calm. When a person does not smoke, levels of dopamine over time will be reduced, so that the body feel bad, can not concentrate, then the person will seek to smoked another cigarette. Addicted smoker, automatically it would be difficult to stop the habit.^{17 25} Based on the research results Nurmala et al (2007) showed that the majority of survey respondents claimed to have tried various ways to quit smoking but most admitted failure. Determining factors or determinants of human behavior is difficult to be limited because the behavior is resultansi of various factors, both internal and external (environmental).²⁶

CONCLUSSION AND SUGESTION

Based on Mc Nemar test, showed there were differences in the level of knowledge ($p=0.000$) and attitude ($p=0.008$) and there are no differences in behavior ($p=0.219$) before and after the implemented “petugas pengawas perokok” method. Further research is needed to determined the effectiveness of this method by the more number of respondent, wider area, as well as a longer time

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