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Health Education in Principle of Community Affected Teenagaer's Smooking Attitude and Habitual in the Coastal Area of Madura Island Indonesia

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ABSTRACT--- *One of negative changes happened to teenagers is smoking habit. Whereas chemical contents in each* ***cigarette*** *are able to harm every person who smoke it, even the surrounding. Due to the bad effect, it is very urgent to avoid by preventive and promotive action. While the aim of the study is to analyze the impact between health education systems based on community to attitude and smoking habit on the teenagers. This is a quantitative research by design of quasi experimental. The population in the study is 56 teenager smokers that collected by using simple random sampling. Here the samples are divided into 2 groups, contains about 28 persons. Treatment given to them is intervention on community base of health education, while 28 in another group are only given a leaflet describing the dangers of smoking. As the study result, it is known that using an independent attitude test on group of treatment and group of control before the process are p = 0.182, and smoking habit score on them before process are p = 0.664. The average difference on member of group treatment and control attitude score noted after intervention is p = 0.000. And the average difference score on smoking habit of group treatment and control after intervention is 0.000. These notes show that attitude and smoking habit before and after treatment is different. The difference in delta score on group of treatment and control after intervention is p = 0.000. While the difference in delta score on smoking habit after intervention is also p = 0.000. This study shows that the respondents in group intervention owing better attitude and behavior than group control. And the meaning is community bases on health education can be used as an alternative way to prevent and promote the step to handle young teen smokers.*

Keywords---*Health Education, Teenagers, Smoking habit.*

I. INTRODUCTION

Teenagers are the ages between children age of adult age contains of full transformation steps. The transformation process could be the negative changes also, such as smoking habit [1]. As we know that each stick can be harm to the body health just because of the chemical contents. Further, they can be the source of disease for the consumer. Having a connection with the worst impact, it is needed to prevent teen's negative changes together at home and the society [2]. Based on the *World Health Organization* (WHO) data, tobacco as the main ingredient

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of the cigarette is recorded as the main factor of 5 million people killed every year, unfortunately it is also predicted will go up to kill another 10 million people during 2020. Later, the notes tell about 70% of the fatal victims coming from Asia as we are known as the developing country, and most of them are male. Other data is, the teen smokers at the age 15 up reaches 1,1 billion people from all over the world, and it is almost one per three the whole population.

In number, cigarette consumption in Indonesia stays on the fifth ranker after China, Us, Japan and Russia [3]. The number of age 15 – 19 smokers reach 38.4 % male and 0.9% female. This age ranges teen of the third class students on Junior High School to Senior high school, while on the early college age as they first start smoking show their adult attitude [4]. Later, East Java sits on the second rank for the numbers of smoked cigarettes after Jakarta which almost 11.5 %, and almost 12.3 sticks, or a pack of cigars are smoked every day [5]. Taken from data collected by public health expert association sub regional management in East Java stated that young smokers, include child and teens, reach the number of 2.839.115 people. Divided as age 10 smoker 11.5%, counted as 687.755 people from the total population in the same age. Next smoker at age 10 to 14 reach 23.9% or 728.108 people. And the fantastic number stays on age 15 to 19 that reach 46% or 1.423.252 people from the total east Java population in the same age that on year 2015 noted as 3.094.028 people [6].

Linked to the background study, which is held by taking random on 10 samples, 7 among them stated themselves as smokers, while they can smoke about 5-7 cigars every day, Whereas this habit is done for a year or more. The pity, they also stated that know nothing about the danger of smoking. Further, they also tell that this habit firstly caught from their friend invitation, beside the eager to taste the smoking sensation until they have smoke, abuse and forgetting all of the impacts and the danger of smoking. This smoking habit on teens connected with the knowledge, attitude and education. Since the knowledge can give impacts on their lifestyle due to healthy life habit. Later, teens who get information related will flow the perception as their psychological site. And wide, knowing about the danger of smoking to the body health is aimed to create a principal attitude to keep the smokeless teen on their healthy habit, while the abuser could be able to stop smoking [7]. Early health education is very needed to avoid and minimize the smoking habit on the teens.

II. METHOD

Research Design

This research is quantitative by the design of quasi-experimental. The population of this research is 56 teen smokers. Sampling technique used is simple random sampling. It divides those 56 into 2 groups. One is group treatment, they get a community base Interventional education. The first health education held by the researcher is once in 2 weeks and continued by the health care once a week for 2 weeks. The other is group control who is only given leaflet explain the danger of smoking. The research instrument used in this research is questionable about smoking attitudes to measure smoking attitudes, and questioner about smoking habit using Fagerstorm style.

III. RESULTS AND DISCUSSION

A. Results

Table 1: Demography Data

Data	Amount	Percentage
Age		
15-18 years old	16	28,6
19-21 years old	28	50
22-25 years old	12	21,4
Level of Education		
Middle School	19	34
High school	37	66
Reason For smoking		
Stress	6	10,7
Follow friends	28	50
After Eating	10	17,9
There is more money	12	21,4
Smoking History		
1 years	10	17,9
2 years	32	57,1
3 years	8	14,3
>4 years	6	10,7
Total	56	100

Table 1 shows the age of the majority of respondents were at the age of 19-21 years as many as 28 people (50%), the education of the majority of respondents were in high school as many as 37 people (66%), the reasons for smoking majority of respondents were because of joining as many as 28 friends (50%), the majority of respondents have been smoking for two years, 32 people (57%).

2. Specific Data

Table 2: The average difference on attitude score and smoking habit before and after getting a community base health education on Group Control

Variable	Score	Mean	SD	P-Value
Attitude	Pre	56.86	3.91	0.156
	Post	57.46	3.41	
Behaviour	Pre	5.75	1.07	0.102
	Post	5.61	1.10	

Based on table 2, the average on group control attitude score before health education is 56.85 ± 3.91. And attitude score after the education process is 57.46 ± 3.41. The result of paired t test on the same area after the education process is p = 0,156, it shows nothing different in significant on group control before and after education process. In other side, smoking behavior scores of group control before the health education is 5.75 ± 1.07. And

attitude score after the education process is 5.61 ± 1.10. The result on Wilcoxon signed rank test for behavior score is p = 0.102, means that there is no difference significantly exist in the attitude score of the group control before and after health educational base on community.

Table 3: The difference average on attitude score and smoking behavior before and after health education base on community for group treatment

Variable	Score	Mean	SD	P-value
Attitude	Pre	58.32	4.19	0.000
	Post	64.36	3.34	
Behaviour	Pre	5.89	1.10	0.000
	Post	3.89	0.95	

Based on table 3, average scores for attitude on group control before education is 58.32 ± 4.19 and average of behavior score after health education base on community is 64.36 ± 3.34. The result of the paired t test for behavior score is p = 0.000. It means that occur significant difference in behavior score in group treatment before and after health education base in the community. Whereas the average for an attitude score of the group control before education is 5.89±1.10 and the average score on behavior after education is 3.89 ± 0.95. While the result on Wilcoxon signed rank test for behavior score is up = 0.000. It means that there is a significant difference on behavior score of group treatment before and after health education base on community.

Table 4: The difference average on smoking attitude score before education for group control and group Treatment

Variable	Group	Mean	SD	P-Value
Attitude	Treatment	58.32	4.19	0.219
	Control	56.86	3.91	
Behaviour	Treatment	5.89	1.10	0.664
	Control	5.75	1.07	

Based on table 4, average scores for attitude on group treatment before an education base on community is 58.32 ± 4.19 and average of group control is 56.85 ± 3.91. The result of the Mann Whitney test for behavior score is p = 0.219. It means that occur no significant difference in behavior score in group treatment and group control before and after health education base in the community. Whereas the average for an attitude score on group treatment before education is 5.89 ± 1.10 and average score in group control is 5.75 ± 1.07. While the result of the Mann Whitney test for behavior score is p = 0,664. It means that there is no significant difference on treatment score of group treatment before and group control before and after health education base on community.

Table 5: The average difference in smoking attitude score after education for group control and group Treatment

Variable	Group	Mean	SD	P-value
Attitude	Treatment	64.36	3.34	0.000

	Control	57.46	3.41	
Behaviour	Treatment	3.89	0.95	0.000
	Control	5.61	1.10	

Based on table 2.4, the average score on group treatment before health education base on community is 64.36±3.34 and group control is 57.46 ± 3.41. And the result on the independent t test score for the attitude is p= 0.000 means that there is significant attitude score on group treatment and group control after health education base on community is 3.89 ± 0.95 and it is 5.61 ± 1.10 for group control. While Mann Whitney test showing score on p = 0.000 that means there is a significant difference score on group treatment and group control behavior after health education base on community.

Table 5: The delta average difference on attitude score before and after health education for group control and group intervention

Variable	Group,	Mean	SD	P-value
Attitude	Treatment	6.03	2.70	0.000
	Control	0.60	2.19	
Behaviour	Treatment	2.00	0.72	0.000
	Control	0.14	0.44	

Based on table 5, the delta average difference on group treatment attitude score before and after health education base on community is 6.03 ± 2.70 and on group control is 0.60 ± 2.19. And the result on Mann Whitney test for attitude score is p = 0.000 means that occur such delta significant difference on group treatment and group control attitude after health education base on community. While the delta difference on behavior score for group treatment before and after the health education base on community is 2.00 ± 0.72 and score for group control is 0.14 ± 0.44. Later the result of Mann Whitney difference for behavior score is p = 0.000 means that occur such significant on delta score difference for group treatment and group control behavior after health education base on community given.

IV. DISCUSSIONS

1. The influence of health education on teenagers smoker attitude

Based on the study result, it is noted difference score on group control and group treatment attitude, which shows that health education base on community intervention play effective role in increasing the teen smoker's attitude. Attitude structures consist of 3 components such as cognitive, affective and conative. Since cognitive component related with knowledge, point of view and believe to the object. Those three are linked with how somebody perfected object attitude. Next affective component consists of whole someone's feeling or emotion due to the attitude. This feeling can be form of like or dislike on certain object, while dislike is kind on negative feeling. Later this component leads to negative or positive attitude. Further, affective component deals with subjective emotion due to certain object of attitude. Generally, it is similarly likened to the feeling of owing something. Next,

conative component tends someone to give reaction onto it. This component shows intensity of big or small tends of action or someone behavior due to attitude object [8].

Stated that teen's attitude direct to the smoking prohibition given mostly value positive. It means that most of them agree with the law, which prohibited someone to smoke [9]. Shows that respondents who get certain advice on consoling session have a chance about 2.12 times bigger than who are not, to stop smoking by the same year [10]. This statement is approved by other research that stated motivation given is base condition to stop smoking [11]. Similar research also done, here stated that teen respondent agrees with the statement about the cause of someone eager to smoke is the eagerness related to it and friend influence also, further more than half of them are agree not to smoke anymore [12].

HPM theory, stated that during health promotion process exist social cognitive component theory and activity related affect. Next on social cognitive theory, it is described that interaction happened in the environment, social humanity and behavior interplay one another. Subjective feeling occurs before, during and after behavior, based on the character of feeling stimulus its self. Next, affective respond will be light, medium or heavy, while it is consciously been waited, saved inside memory and also can be linked to the next thinking behavior. Affective responds due to special behavior consist of 3 components, such as emotion which able to rise on the behavior its self (activity related), treat selfness (self-relation) or environment for the act takes place (context related). Feeling occurs here might influence the wish to repeat action or keep other old behavior. Certain feeling depend on this behavior is analyzed as health behavior determinant on the last research. While behavior relate with positive thing will be repeated and for contrast, those with negative effect will be avoided, since some behavior able to rise positive or negative feeling [1].

Balance between negative and positive effect before, during and after certain behavior is one of the important areas to know. Interpersonal side influence health promotion behavior directly or indirectly by social pressure or push to commit on the treatment planning. Every individual might owe their special sensitivity to hope, for example wish of praise from other. Enough Gift of motivation due to behavior consistently from the influence of interpersonal might lead someone to perform behavior that rising praise and social support to them [14].

Education methods base on community used in this study promote teenagers to follow 4 steps in package to increase their attitude towards the smoking habit, and it takes time for 4 weeks. Here the researcher trying to change teen's behavior by running 4 steps of health education methods. First is digging point of their thinking and feeling before intervention is applicated. Second is digging information related to the smoking factor, next researcher gives health education by showing many bad views about the danger of smoking. Fourth is applying health education by health agent towards the danger disadvantageous of smoking. It is stated that effectiveness steps in many interventions is to control tobacco which needs duration about 50 minutes up to one and half hours every session runs for 4 to 8 weeks [15].

This method describing and giving realistic tutorial linked to certain attitude that should be owned by the teen towards smoking act. So, they can have positive mental to the smoking behavior. Further behavior can be influence by many factors. One of them is education background. In this study, most of teen gets their Senior High School. From the data, having this level of education leads them to understand everything easier. After they understand it, then they can try to made synthesis in the form of their thinking which perform on their behavior. Here he stated that young adult male with their high education know better related to the disadvantageous and the danger of

smoking, later they owe more positive attitude towards smoking. Unfortunately, this knowing and attitude not always interpreted as positive action like avoiding smoking [12].

Other factor plays important role to the result of the study is respondent age. This study is done mostly to age 19 to 21 respondents, whereas this range of age is also known as teen switchover. This range is the episode of them to searching for their personality and become more sensitive. And during this moment, if they do not get certain positive guidance, then it will lead them to negative point. For the contrast, teen who get positive guidance will easy to walk positively. Someone internal factor divided into internal emotion, sometimes certain attitude describes ones statement based on their emotion as the way to express their frustration or diversion form of ego mechanism [8]. Growth and development on age of 18 – 21 reach the level on physical maturity and ongoing emotional maturity. During that range, someone needs such information suit with their age related to the healthy life style [16].

Based on the study result it is noted that most respondents got the information related with the danger of smoking. Since this info become basic foundation in building knowledge. Right information leads someone to act more positive. Teen who get positive information progress will guide their thinking in changing their attitude better. For contrast, teen who get non positive information will be easier to influence by the advertisement promotes tobacco, junk food and alcoholic drinks, even the glamorous life style, even when the approval also presents the fatal risk onto the body health. For example, difference knowledge about the danger of smoking play dominant role forever [17]. In different countries, by campaigning anti-smoking, public education, human anti-smoking rights, comprehensive program to raise the price, indoor healthy air law, and mass media campaign show the successes in publication the fatal risk of smoking and reduce the smoker [18].

In the year of 1999, almost 92 % American got cancer as the gift of their smoking habit, and on 2006, about 84% of the population agreed that smoking is danger due to the body health [19]. Later they rationally reduce the smoking habit in all social economy group, but it is also fact that the will on quit smoking have their own difference based on social economic live [20]. Further, respondents on group control in this study do not change the attitude as the result. This is because of they only get leaflet about the danger of smoking or what we call as conventional counseling methods. The increasing experiment that is not significant caused the knowledge adequate consequences. And it is caused the lack ability on someone attitude. The explain that attitude is tendencies, point of views, opinion and principle in valuing certain object or problem, and later act based on their conclusion by realizing positive or negative feeling towards something (8).

2. The influence of health education due to teenagers smoking habit

Taken from the result of the study, it is founded that difference in group control and group treatment attitude score shows that intervention on health education base on community is effective in decreasing smoking abuse in teen level. While internal factor impacted in this decreasement score on respondents smoking abuse is that because they bored smoking, owing good intention, and awareness towards the danger of smoking. In other side, external factors play role to leads the bad habits are stress, environment and economy. Many respondents tell that their internal feel bored of smoking. They also tell that they really owe intention to quit smoking. It is better because the problem of someone who gets difficult to stop smoking is come from their own internal hard intention. Shows the significant relation between self-control and motivation to stop smoking factors [21]. Other study also stated

that education base on community can impacted to smoking habit on the early teen [22]. The analysis also supports the statements before. It is stated that the result on qualitative research done by the researcher shows that from 12 smoker informant tell their motivation to quit smoking occur by the existence of their own will. Next they also describe that sometimes they realize about the disadvantageous of smoking, even the danger risk lead them to try stop smoking. Beside they also tell external respondents [23].

The changing score on smoking abuse for group intervention is influenced by many factors like hard self-intention, self-control treatment, and discussion interaction during the program of health education base on community. And taken from the average score on attitude there exist increasement after the education given. Later more positive attitude also occurs and influence their personal intention to change smoking habit is very important to grow first. This thing makes respondent decrease their willing to smoke and decrease the smoking abuse because the intention is linked to the result which is really wish to reach by each respondent. Since the self-intention is different one another, it is not far difference as the priority goal on the health education base on community is still the same, such as to lead respondent step by step decrease their smoking abusement level until they are fully ready to quit smoking. This assumption [22], that strong intention play important role in getting successes on the effort to stop smoking, as far the strong intention will help to control the smoking habit.

Other research stated that if someone makes decision to do something, then the result for him will worth it, later the result if self will give certain value compare with someone who will stop smoking without strong intention. It is because strong intention also growth the self confidence that help them control smoking behavior [24]. This is supported by other study that stated there exist significant correlation between self efication as the supporter and strong intention on teen to stop smoking with the coefficient correlation score is r = 0,533. So that from the result of the analysis, it is known that the correlation is medium level since the score took place between intervals 0.40-0.599. While p value = 0,000 (as $p<0.05$) which shows the correlation between self efication and strong intention to quit smoking is significant [25]. And from this result, it is also concluded that higher self-confidence will rise up one's intention to quit smoking. Beside self-intention, social supported factor also play role in influencing someone to get their success in stop smoking, not only by pharmacology therapy but also no pharmacology therapy. It is generally because social support will impact in one's attitude, start from their environment and social adaptation [26]. The form of social support in this study deals with the role of health agents in health education process, because role model is one of the suitable approach to influence someone in controlling their attitude and behavior. During the health education process, support given is in the form of motivation from researcher and agent of health to help changing respondent smoking behavior.

There is also stated from earlier research that motivation given is one of the base condition on the quit smoking fight effort [11]. Other also stated that smoker once have self-intention to change their smoking habit, it will be the duty for the researcher to accompany them by strong positive advice, while at the same time they must avoid from judging or blaming. And as the advice is given, next duty for them is to accompany the smoker to change their habit. And to monitor this thing, the researcher must need timeline or schedule related to the respondent to stop consuming cigar and concern on tobacco logbook for the respondent and counselor as the evaluation source everyday [27]. Certain study held, shows the respondent who got such advice to stop smoking counseling have a higher chance about 2.12 times more ready to quit smoking by this year, compare with those friend who do not get

the counselling. And based on the study, the counseling program shows no significant effect for someone to stop smoking, by the way the consoling put the smoker in the preparation step to stop smoking [10].

Decision that press someone to decided smoking or not smoking is depend on themselves and also information related with it. Lack of information to build certain attitude or behavior will weaken, until they are worried to cause someone behave not in properly. There is significant difference on the college learner before and after the intervention, even the motivation on them is rising after getting self-help smoking explanation on group. This is because quit smoking program always strongly linked with self-motivation because it is the base effort in quitting smoking. All the way, it is very important to the motivation related to the intention on quitting smoking before and after the smoker really stop smoking [11]. Someone must owe their strong motivation to support the attitude quitting smoking and put willingness to their selves related to keep stop smoking [28]. Next on group control, it is found no respondents own the smoking habit decreasement. This is because they only given the leaflet explaining the danger of smoking. This method is only reaches their cognitive aspect, but experience aspect maximally reach 30 % only. And it is similar with Dale statement (1946) that verbal area and visual only enrich someone experience for about 30%. By the fact, the respondents on this group still stagnant on doing their smoking habit and found no decreasement [29].

V. CONCLUSIONS

1. Health education base on community give influence due to the rising of teen smoking attitude
2. Health education base on community give influence due to the decrisement of teen smoking activity and abusement
3. Health education base on community gives effectiveness in rising up teen smoking attitude
4. Health education base on community decrease the teen activity of smoking and abusement

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