



## **Conference Paper**

# The Effectiveness of Smoking Corner in RT 001 RW 004 Tirta Siak Pekanbaru

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### **Abstract**

Indonesia is facing a big challenge which is Triple Burden, because there are still inflectional diseases and the raising of non-contagious disease, and a disease that should have been resolved, reappeared. In this situation, the government literally has already made a community movement, which is healthy life community movement to decrease the number of death and illnesses. In the early step, the community movement started on focusing in a 30 minutes' physical movement per day, consuming vegetable and fruit; and regularly do the medical check up. According to the health profile, Case Notification Rate (CNR) BTA (+) in Titra Siak is about 80,4 per 100.000 citizen and Case Notification Rate (CNR) of all TB case is about 168 per 100.000 citizen. Besides that, rate healing number of TB is 0%, diarrhea case reaches 15,7%, hypertension hits 14,8%, obesity reaches 29%, and BCG vaccination reaches 88,4 %. The aim of this research is to measure the effectiveness of smoking corner. This writing is a Quasi experiment with One Group pretest-postest design. Population is all the smoker in the RT 001 RW 004 which are 62 people, total population is the sampling technique. The research result showed that the mean of citizen's knowledge before the smoking corner existed is 59,84% with deviation standard is 11,379, the mean after smoking corner existed is 72,74 with deviation standard is 6,317, pvalue = 0,00001 (< 0,05). Meanwhile the citizen perception before the smoking corner existed, the mean is 60,81 with 11,636 in standard deviation, after the smoking corner existed, the mean is 74,68 with 10,036 in deviation standard, P Value = 0.00001 (< 0.05). It could be concluded that there is a significant different between knowledge and the perception about smoking corner before and after the smoking corner existed.

Keywords: effectiveness, smoking corner, knowledge, perception

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# 1. Introduction

Indonesia is facing a major challenge, which is the triple burden health problem, because there are still inflectional diseases, and the raising of non-contagious disease and the medical problem that should have been resolved, reappeared. However, the changing of the life style becomes one of the causes of epidemiology transition. In 2015, non-contagious diseases such as stroke, coronary artery disease, cancer, diabetes, are in the

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top chart. The health service of national health insurance (JKN) is also being dominated by the cost of medical care in higher level rather than in the basic level. This fact needs to be processed because it is potentially become a burden in country's financial [1].

The raising of inflectional disease and non-contagious disease could decrease the productivity of human resources, even the nation generation quality. This also affects the amount of the government burden because the handling need a big cost to be spent. In the end, the healthiness will affect social and economy development [2].

**Tuberculosis** is a direct contagious disease that caused by TB germ (*Mycobacterium Tuberculosis*). Most of TB germ attacks the lungs, but also can affect another organ [3].

# Aflycobacterium tuberculosis Tuberculosis

# TUBERCULOSIS

Figure 1: The Transmission Method of Tuberculosis Germ.

According to Global Tuberculosis Report in 2017, it is known that the incidence of Tuberculosis in Indonesia is around 391 per 100.000 people per year. The new TB case in Indonesia is 420.994 cases in 2017.

From the table above, it is known that *Case Notification Rate (CNR)* in Indonesia has increased within last 3 years, that in 2017, it is reached 161 per 100.000 citizens.

From the table above, we know that *Case Detection Rate (CDR)* within last 3 years has also increased in 2017, and hit 42,4%.

From the table above, Case Detection Rate in Riau 2017 reached 31,6. According to the Payung Sekaki Health Center health profile in 2017, it is known that Tirta Siak Urban Village has 11 suspect of TB BTA (+) and 1 TB suspect is 0-14 years old with all TB cases around 23 suspects.

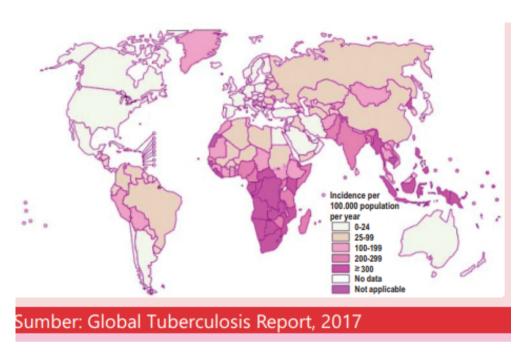


Figure 2: Insidence of Tuberculosis.



Figure 3: Case Notification Rate per 100.000 of Indonesia Citizen from 2008 – 2017.

Meanwhile the number of *Case Notification Rate* (CNR) BTA (+) in Tirta Siak is 80,4 per 100.000 people. Besides, the healing number of TB in that Urban Village is 0%.

According to the sex, the number of TBC case for men in 2017 is 1,4 times bigger compared to women. Even according to the prevalence survey in Tuberculosis Prevalence in men is 3 times higher than women. So do with the other countries. This possibly happened because mostly men got radiated by the TBC risk factor such as smoking and



Figure 4: The area of medication for All TBC case (Case Detection Rate) of Indonesia from 2008 - 2017.

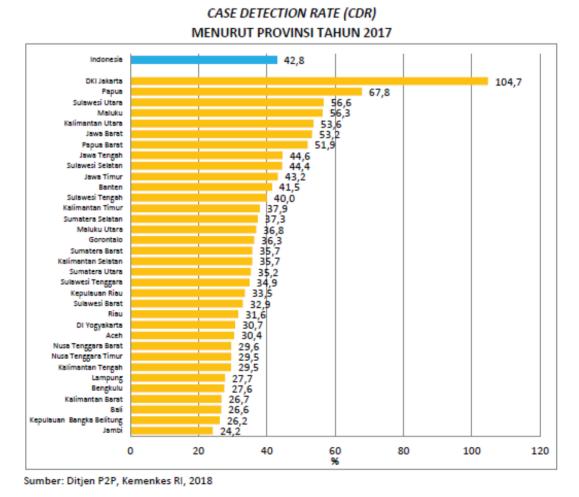


Figure 5: Case Detection Rate According to the Province in 2017.

inconsistency of having medication. This survey found out that from all of the smoking men participants is 68,5% and only 3,7% of the women participants who smoke.

The basic health research stated that the citizens aged over 10 years old who smoke is 29,2% and that number increased higher around 34,7% in 2010. To the age group over 15 years old. 76,6% of smokers smoke inside the house when the other family members around. Besides that, citizen's low awareness about the harm of smoking makes the reduction of smokers number is getting hard. The lowest number of smoking is in the age of 15 - 24 years old and over 75 years old. This means that mostly smokers came from young generation or productive age.

The survey result in Tirta Siak Urban Village gained that smoking citizen is 80% (both inside and outside the house) and nonsmoker is 20. Because of that the control of smokers who produce the very harmful smoke is crucial as the solution of breathing the fresh air without any smoke transmitted. One of the actions is the implementation of no smoking area. The Joint Regulation of the Minister of Health and Minister of Home Affairs Number 188 / Minister of Health / Pb / I / 2011 Number 7 in 2011 about the guidelines of the implementation of no smoking area stated that the importance of no smoking area [4]. Nonsmoking area in health care facility, learning places, playground, worship place, public transportation, and other places that protect the citizens from cigarettes smoke [3]. Moreover the indicator of no smoking area establishment in public places is providing a special place for smoking known as smoking corner. Because of that, it would be necessary to hold a research refers to the effectiveness of smoking corner in Tirta Siak Urban Village Pekanbaru.

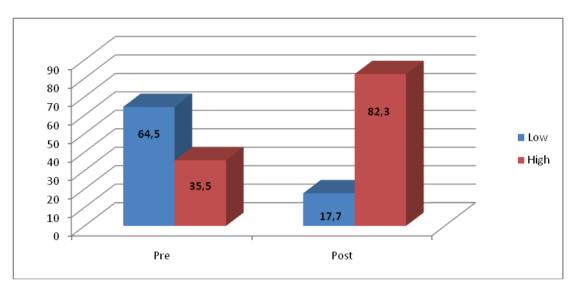
# 2. Research Method

The kind of this research is quantitative analytical that used Quasi experiment with *One Group pretest-postest* design for the effectiveness of smoking corner. Controlling of observation variable and treatment given. Each subject becomes the control for themself and observing the results variable had been done before and after treatment. Before the treatment had been given, a questionnaire was given to each subject to find out their knowledge about smoking and perceptions of smoking corner, and then after the treatment was given to the group, the researcher gave another questionnaire to find out the knowledge about the dangers of smoking and perceptions of smoking corner. The population is all 62 people who smoke in the area of RT 001 RW 004. The type of data collected is primary data. Data analysis that used is univariate and bivariate.

# 3. Result

# 3.1. Univariate analysis

# 3.1.1. The pretest and the posttest of respondent knowledge about smoking



**Figure** 6: Respondent Distribution According to the Pretest and Posttest of Knowledge about Smoking in RT 001 RW 004 Tirta Siaj, Payung Sekaki, Pekanbaru 2018.

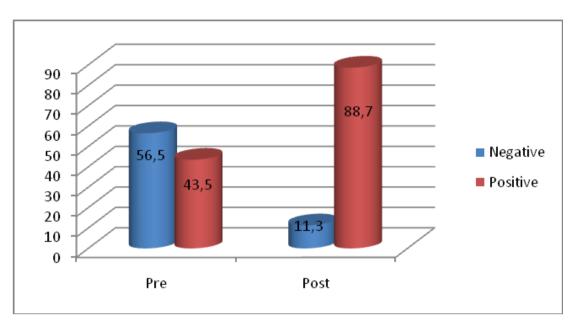
According to the Figure 1, it is known that 62 citizens of Tirta Siak seemed experiencing the different knowledge before and after smoking corner existed. It could be seen that high knowledge before the smoking corner existed was only 35,5%, after the smoking corner existed, the knowledge about smoking raised into 82,3%.

# 3.1.2. Pretest and posttest respondent perception about smoking corner

According to the Berdasarkan Figure 2, it is known that 62 citizens of Tirta Siak seed having a Perception change before the smoking corner existed and after the smoking corner existed. It could be seen that the positive perception before smoking corner existed was only 43,5%, after smoking corner existed, it is increased to 88,7%.

# 3.2. Bivariate analysis

According to the table 1, it could be seen that the mean of citizen's knowledge before smoking corner existed is 59,84 with 11,379 deviation standard. In the knowledge after



**Figure** 7: Frequency Distribution of Respondent According to the Pretest and Posttest about Smoking Corner in RT 001 RW 004 Tirta Siak, Payung Sekaki, Pekanbaru in 2018.

TABLE 1: Frequency Distribution of Respondent According to the Knowledge in RT 001 RW 004 Tirta Siak, Payung Sekaki, Pekanbaru in 2018.

Variable	Mean	SD	SE	P Value	N
Knowledge Before Intervention	59,84	11,379	1,445	0,001	62
Knowledge After Intervention	72,74	6,317	0,804		

smoking corner existed, it is known that the mean is 72,74 with 6,317 standard deviation. Based on the statistic test, the P Value = 0,001 (< 0,05), so it could be concluded that there is a significant different knowledge between before smoking corner existed and after smoking corner existed.

TABLE 2: Frequency Distribution of Respondent According to the Citizen Perception in RT 001 RW 004 Tirta Siak, Payung Sekaki, Pekanbaru in 2018.

Variable	Mean	SD	SE	P Value	N
Smoking Perception Before Intervention	60,81	11,636	1,478	0,001	62
Smoking Perception After Intervention	74,68	10,036	1,275		

According to the table above, it could be seen that mean of citizen's perception before smoking corner existed is 60,81 with 11,636 deviation standards. Meanwhile, the mean of perception after smoking corner existed is 74,68 with 10,036 deviation standards. The statistic result gained P Value = 0,001 (< 0,05), so it could be concluded that there is a significant different between perception before smoking corner existed and perception after smoking corner existed.



# 4. Discussion

Smoking is a daily activity that harmful but many people in every place keep doing this habit or the smoker will be easily found. The danger of smoking does not only affect the smokers but also could harm those who are not smoking in that area. Perhaps, it is not common issue to hear that smoking is dangerous to the human health, because literally there were a lot of notice and warning heard from many media about the danger of smoking in the cigarettes box. But it is strange to see many people keep smoking [5].

The smoke of cigarettes contains 7000 chemical substance, mostly of them are poisonous to the human body. By the time the chemical substance reaches the tissue, it will affect the health. As soon as the body exposed to the smoke of cigarettes, the body will be forced to stop it. As the result, the effect of smoke exposure will lead into a disease.

Besides that, the highly price of the cigarettes should have become a barrier to those who with low income to smoke. In the fact, in Indonesia, active smokers mostly come from people with the lowest quintile property with 60%-80% distribution, from the number of citizens, both in the village or in the city. With underprivileged family, the outcome percentage for smoking is even more.

According to the data, it is known that 62 citizens of Tirta Siak who are smokers, the mean of their knowledge before smoking corner existed 59,84 with 11,37 deviation standards, after the smoking corner intervention, it is known that the mean is 72,74 with 6,317 deviation standards. The statistic test result of P Value = 0,001 so it could be concluded that there is a different between the knowledge before and after the smoking corner existed.

The knowledge of cognitive is a very crucial domain to shape the someone's perception (event behavior), literally, the behavior based on the knowledge will be lasting than behavior without knowledge [6]. The different knowledge of respondent about smoking can be caused of the support of the community leaders. This could be seen with the allowance of re-building an abandon place to be used for smoking corner. Furthermore, smoking corner development activity also involves the citizens. By the implementation of that activity, the first step to maximize the human resources to build a nonsmoking area had been done very well. The use of smoking corner by the citizens as the effort to reduce the smoking habit inside the house also could be seen. It was shown using smoking corner of smokers in that area. Besides that, the health information given to the smoker who use the smoking corner, such as poster, and brochure that explain about the harm of smoking is also available in the smoking corner so it gives more knowledge about the danger of smoking[3].

As Hamalik says, the learning media is a tool, method, and technique used in making effective the communication and interaction between the messenger and the receiver of the message in a learning and teaching process at school [7]. According to the research result of Wati et. Al in 2017 about the implementation of nonsmoking area according to the local regulation Metro City number 4 2014 the result obtained that obstacle factor of implementing the local regulation is ineffectively socialization done by the supervisor of nonsmoking area, so the citizen's understanding about nonsmoking area is low [5].

The respondent who has the positive perception about smoking corner is 27 people (43,5) and the ones with negative perception about smoking corner is 53 people (56,5). According to the table above, it could be seen that the mean or average number of citizen's perception before smoking corner existed is 60,81 with 11,636 deviation standards. Meanwhile the mean of perception after smoking corner existed is 74,68 with 10,036 deviation standards. The result of statistic test is P value = 0,001 then it could be concluded that there is a significant difference between the perception before the smoking corner existed and after smoking corner existed.

The low of citizen perception about smoking corner in the pretest was because the citizen got less socialization and information about the danger of smoking inside the house, such as affecting the health disorder not only to himself but also to the family members who breath the smoke [3]. Along the citizen's neighborhood, it could not be found the information about nonsmoking area or smoking corner or the danger of smoking, even, many cigarettes advertisement found in many places. Besides that, the selling of cigarettes also easily be found around the citizen's neighborhood so smoking habit inside the house is common.

The changes of perception about smoking habit is because of the socialization done by the researcher that assisted by the community leader. The socialization was about the danger of smoking inside the house or the warning to use smoking corner to smoke. Smoking corner is part of the implementation of nonsmoking area. One of the activities of implementing nonsmoking area is by doing the socialization to the citizens.

The spread out of the information and the socialization about nonsmoking area done by using many method and media in many challenge so the implementation of nonsmoking area could be known and implemented by all parties, both for the coach, supervisor smokers and nonsmokers by implementing the punishment according to the implemented law [7].

If it is studied about the nonsmoking implementation definition, it is interpreted as the effort of protection for citizens towards the thread risk of health disorder because the environment that polluted by the smoke. The implement of nonsmoking area needs to

be held in health care facility, learning place, playground, worship place, public transportation, working place, public places that had been set, to protect the citizen from the smoke of cigarettes. Seen from the definition, there is no regulation that focused on nonsmoking area in a household level. However, the smoking habit gives 40,5% population of all ages to be exposed by the cigarettes smoke inside the house.

According to the result of Azkha's research in 2013 about the study of effectiveness of setting the local government policy about nonsmoking area in an effort to decrease the number of active smokers in West Sumatra in 2013, the result obtained that citizen's opinion about the implementation of nonsmoking area, most of them (60%) supported the implementation of nonsmoking area, 51% citizen stated that nonsmoking area is quite effective in reducing the number of active smoker, half of the respondents assumed that nonsmoking area implemented in a specific location only. Respondents opinion towards the smokers in the public place is more than a half (58%) will be given the punishment. Respondent's support towards the nonsmoking area policy is still more than a half, 60% was not supporting the nonsmoking area policy, to make the respondents support more about the policy so a team with community leader is needed to give socialization. This is based on the smoking habit is not easy to prevent because it is connected with habits and culture [7].

# 5. Conclusion

The effectiveness of smoking corner altogether with creating the smoking corner and the sharing of health information about the harm of smoking and the harm of the smoke showed the significant difference between the knowledge and the perception about the smoking corner before and after the smoking corner existed. The increase of citizen's knowledge and perception about smoking corner has been increased after the intervention. This could be seen from the mean of citizen's knowledge before the existence of smoking corner is 59,84 with deviation standard is 11,379, and the mean after the smoking corner existed is 72,74 with deviation standard is 6,317, *p value* = 0,001.

Meanwhile the citizen's perception before smoking corner existed, mean is 60.81 with deviation standard 11.636, the mean after the smoking corner existed is 74.68 with deviation standard is 10.036, P Value = 0.001.



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# **Conflict of Interest**

The researchers stated that they have no competing interests

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