

Factors Affecting The Effectiveness of Application Local Regulation of Cigarette Free Areas in Puskesmas Balangan District

Herry Rusandy^{1,2*)}, Ruslan Muhyi³, Erida Wydiamala³, Husaini², Lenie Marlinae⁴

¹Balangan District Youth and Sports Office, South Kalimantan, Indonesia

²Master Programme in Public Health, Faculty of Medicine, Lambung Mangkurat University, South Kalimantan, Indonesia

³School of Medicine, Faculty of Medicine, Lambung Mangkurat University, South Kalimantan, Indonesia

⁴Public Health Program Study, Faculty of Medicine, Lambung Mangkurat University, South Kalimantan, Indonesia

Corresponding Email: hsandy221177@gmail.com

ABSTRACT

Indonesia is the third country of smokers in the world. It increases disease and death by 50% in developing countries. WHO launched "No Smoking Areas" in public places. The purpose of this study was analyzing the socialization, budget, policies, and compliance in the effectiveness of implementing the Regulation on KTR in Balangan Regency. The research subjects were male health services officers in 10 accredited Puskesmas in Balangan Regency with total of 59 people, which determined sample size of 42 people. The method used cross-sectional. Data were analyzed by chi square and logistic regression. The results are there is an effect of socialization on effectiveness of implementing the Regional Regulation on KTR (0.008); there is an influence of budget on effectiveness of implementing Regional Regulation on KTR ($p = 0.080$); there is a policy influence on effectiveness of the implementation of Regional Regulation on KTR (0.003); there is an effect of compliance with effectiveness of implementing Regional Regulation on KTR (0.016); The most dominant influence is policy with a value of $p = 0.004$ and $\exp(B) = 43.530$. The conclusion is there is an effect of socialization, policy and compliance with the effectiveness of implementing the Perda KTR with the dominant variable is policy.

Keywords: Socialization, budget, policies, compliance, smoking

INTRODUCTION

According to WHO (2018), Indonesia is the third country with the highest number of smokers in the world after China and India. This situation resulted in 50% of the deaths due to smoking. In addition, smoking can cause lung cancer (90%), chronic obstructive pulmonary disease (COPD) 75%, and cause heart attacks by 25%.¹

In Indonesia, the provinces of West Sumatra (55.9%), Riau (54.5%), East Kalimantan (54.2%), Jambi (53.1%), and South Kalimantan (52.4%) are provinces with the highest average population who smoked was 11-20 cigarettes per day.^{2,3} Balangan Regency is one of the regencies in South Kalimantan, which ranks fourth with the highest number of smokers, namely (26.1%). The large number of smokers resulted in an increase in the number of passive smokers. This is because the husband/head of the household smokes in the house, so this is a trigger factor for smoking-related diseases.⁴

A total of 19 provinces and 309 regencies and cities in Indonesia have implemented regional regulations or regional head regulations regarding smoking-free areas including South Kalimantan and Balangan Regency.⁴ The implementation of the no-smoking area policy cannot be separated from the commitment of the Regional Head of Balangan Regency since 2015, this form of commitment can be seen from routine monitoring activities, and giving warnings to residents who do not heed the regulation. The activity of providing information on non-smoking areas reaching 85% has been realized through the activity program at the Balangan District Health Office, through the application of this smoke-free area to prohibit cigarette advertisements in Balangan Regency, even designating health institutions (Balangan District Health Office and all Puskesmas) and the Education Office as a pioneer of smoke-free areas, but there are still residents who smoke.⁵

Balangan Regency already has Regional Regulation No. 15 of 2014 concerning No Smoking Areas as well as South Kalimantan Governor Regulation No. 18/2014 concerning Guidelines for the Implementation of Regional Regulations related to smoking-free areas in South Kalimantan Provincial government offices. There are eight areas designated as smoke-free areas in accordance with these Regional Regulations.⁶ Based on the results of inspections of non-smoking areas in Balangan Regency, such as lack of information facilities, allowing employees or visitors or guests to smoke at work place, providing designated smoking areas that do not comply with local

regulations, providing ashtrays at each work table or guest table, not refusing cigarette sales or advertisements or advertisements to allow signs of smoking-free areas to be damaged and the low application of sanctions and rewards to support the effectiveness of the regional regulations without smoking.⁵

The results of the study on the effectiveness of the implementation of regional regulation policies for no-smoking areas by Azkha (2013) explained that there was a tendency to decrease smoking by 59% in public places. This policy restricts the movement of active smokers so that it can provide protection to passive smokers.⁷ The low level of public awareness about the dangers of smoking is one of the reasons for the difficulty of implementing smoking-free areas, as indicated by starting smoking in the 5-9 year group. Cigarette consumption is highest in the 15-24 year age group and the lowest is in the age group 75 and over. This means that most smokers are of the younger generation or of productive age.^{4,8}

According to Latif (2017) around 30% of regencies or cities in Indonesia have regional regulations regarding smoking-free areas, however the effectiveness of these policies in reducing the prevalence of smoking needs to be studied. The content of the no-smoking area policy only limits smoking areas and cigarette advertisements in areas that are mostly in urban areas, lack of smoke-free areas, and sanctions that have not been implemented.⁹ According to the Ministry of Health of the Republic of Indonesia (2017) smokers in the household, especially the head of the household, still smoke inside the house and smoke wherever they are. This was obtained through the students, overall, 53.75% of students stated that their parents or guardians smoked or used tobacco products. Male students (51.26%) were almost the same as female students (56.12%) who stated that their parents or guardians smoked or used tobacco products. As much as 77.57% of students stated that there were people who smoked around them, such as in the school environment, public places, public transportation, places of worship, playgrounds, health services, sports venues and institutional offices for one day or more for 7 days last.⁴

Balangan District Health Office budgeted in the Work Plan and Budget (2017), amounting to Rp. 970,533,000.- there is a budget of Rp. 312,950,000.- for the honorarium for the team for non-smoking areas, meeting activities for non-smoking areas, meetings of the Coalition for Anti-Smoking Health Professionals, procurement of documentation, publications (anti-smoking campaigns, SKPD implementing

non-smoking areas, posters, stickers, banners, billboards and information boards, advice on the dangers of smoking in the media), honorarium for KTR activity sources. Rp. 73,450,000.- there is an honorarium for the task force for monitoring local regulations regarding smoking free areas, promotional activities, socialization and campaigns, procurement of communication equipment, health information and education about the dangers of smoking and non-smoking areas.⁵

Balangan Regency has 12 Puskesmas which have implemented regional regulations regarding smoking-free areas and have a smoking-cessation hypnotherapy clinic, the only one in South Kalimantan. In addition, in Balangan Regency, 5 smoking areas have been built. However, in its implementation in the field, there are still many obstacles and problems of smoking in any place that have not been resolved. Based on the results of monitoring and evaluation of the Balangan Regency Non-smoking Area Development and Supervision Team (2017), there are still people who smoke, especially employees who smoke in the Puskesmas environment in Balangan Regency.¹⁰ Therefore, this study will analyze the socialization of smoking-free areas, budget, policies, and compliance in the effectiveness of implementing local regulations regarding smoking-free areas in order to reduce the number of smoking-related diseases in Balangan Regency.

METHOD

This study used a quantitative approach with observational analytic using a cross sectional study design. This research was conducted in 10 accredited Puskesmas in Balangan Regency. This research was conducted in March-August 2020. The population in this study were all male officers, who provided health services at the puskesmas totaling 59 people. The inclusion criteria were no smoking and active smoking at the time of study; The data used are the evaluation data of the Team for the no-smoking area of Balangan Regency in 2018; Currently working in the area of the puskesmas to be studied. The size of the sample in this study uses the Lemeshow formula, (1997).¹¹ Statistical test using the chi square test and logistic regression.

RESULT AND DISCUSSION

The results of the research on the effect of socialization, budget, policy and compliance with the effectiveness of local regulations regarding smoking free areas are as in Tables 1 and 2.

Table 1. The results of statistical analysis of the chi square test

No	Variable	p	OR
1	Socialization	0.008	5,077
2	Budget	0.081	-
3	Policy	0.003	8,434
4	Obedience	0.016	5,701

Table 2. The result of analysis of multivariate logistic regression test

No	Variable	p	Exp (B)
1	Sosialization	0.008	,028
2	Policy	0.003	43,530
3	Obedience	0.016	13,316

The No Smoking Area Policy continues to be developed by the Balangan Regency government. Local governments must have sufficient information for the implementation and development of smoke-free areas and always think about innovations so that this policy can continue to be implemented and bring benefits to the community. The implementation of the socialization has been going well and location of smoke-free areas have been made in several office spaces or other public facilities. Has implemented KTR in offices, especially health institutions, namely the Puskesmas in Balangan Regency, where socialization has been carried out through various media such as leaflets, pamphlets and dialogues.

The Odds Ratio (OR) value in the Wald column for the Socialization variable is 5.077; policy amounting to 8,434 and compliance amounting to 5,701. Thus it can be said that the influence of the Socialization, Policy and Compliance variables which do not apply the regional regulations without smoking can lead to an effect or risk of ineffectiveness in the application of the regional regulations without smoking, about 5.077 times each; 8,434 times and 5,701 times greater than the appropriate work environment on socialization, policies and compliance.

OR values after controlling for other variables and 95% confidence intervals (95% CI), are shown in the Exp (B) column and 95% CI for Exp (B) in the column at the end of the table. It is known that the OR value of the Socialization variable (X1) is 5.077 and the 95% CI value is between 0.001-0.629. This means that the effect or the lack of good socialization of the regional regulation on smoking free areas on the effectiveness of the implementation of regional regulations for no smoking areas in Balangan Regency is about 5 (five) times greater than the absence of regional regulations

for no smoking areas in Balangan Regency after controlling for other research variables.

The OR value of the socialization variable in multivariate analysis (OR value = 5.077), is referred to as the controlled estimate. Based on the 95% CI value, it can be said that with a 95% confidence interval, poor socialization variables can have an effect or risk of ineffectiveness in the application of non-smoking area regulations in Balangan Regency between 0.001 to 0.629 times greater than the absence of application of non-smoking area regulations in Balangan. Balangan Regency after controlling for other research variables.

The OR value for the policy variable is 8,434 and the 95% CI value is between 3,410-555,650. This means that the influence or risk of policies in the Balangan Regency area that is not suitable for the effectiveness of implementing the Regional Regulations is about 8 times greater than the appropriate policy after controlling for other research variables.

The OR value for the compliance variable was 5.701 and the 95% CI value was between 1.590-111.525. This means that the effect or risk of non-compliance with the application of the Regional Regulations on smoking-free areas in Balangan Regency is about 5 times greater than that of compliance after controlling for other research variables. The OR value of the adherence variable in the multivariate analysis (OR value = 5.701), was referred to as the controlled estimate.

The implementation of the no-smoking area policy is inseparable from the commitment of the Regional Head, this form of commitment can be seen from routine monitoring activities, and giving warnings to residents who do not heed these regulations, such as in Paringin City, the application of this smoke-free area can prohibit cigarette advertisements along the way. the city, has even appointed a health institution as the pioneer of KTR, in this case the accredited Puskesmas in the Balangan Regency area, although residents still smoke, the application of this smoke-free area is expected to help implement a healthy lifestyle in an office environment so it is hoped that in turn can reduce active smoking. Unannounced visits by a team appointed by the regional head will encourage people not to smoke in public places. Cigarette advertisements still dominate the advertisements along the streets, and in offices and educational institutions there are still those who smoke, even though it is a public place by circulating a circular issued by the regent.¹⁰ The application of this smoke-free area is carried out through outreach to the community by using media presentations,

billboards, sticker banners, leaflets, publications in mass media and through community groups.

Socialization is an important source of guidance on how to implement a policy. Policy implementers need to know how to implement policies in accordance with established regulations. Lack of knowledge on how to implement policies will have direct consequences. Continuous and targeted and targeted socialization will not only provide protection for passive smokers but also reduce active smoking.

According to Josef Mario Monteiro (2016), there are several methods that local governments can use to disseminate their regional regulations to make them more effective and comprehensive to all communities in their regions. The methods that can be used in the dissemination of a regional regulation include: a) Announcement via news (RRI, Regional TV) or printed media (news) by the head of the provincial law bureau or the head of the regency/city section. b) Direct socialization by the Legal Department / head of the legal department or by the initiating work unit, universities, competent non-governmental organizations. c) Socialization through seminars and workshops (semiloka) d) Socialization via the internet. Local governments are obliged to disseminate regional regulations that have been promulgated in the regional head regulations and regulations that have been promulgated in the regional news. To enforce regional regulations, the civil service police unit is in charge of assisting the regional head to enforce local regulations and to administer public order and public order. Members of the Civil Service Police Unit can be appointed as civil servant investigators and investigators, as well as prosecution of violations of the provisions of a regional regulations carried out by investigating officers and public prosecutors in accordance with the provisions of the legislation. In order to enforce regional regulations, other officials can be appointed who are assigned the task of carrying out investigations into the budgeting of the provisions of regional regulations.¹²

Respondents' support for the KTR policy was still more than half, namely 57.10%, the rest did not support the smoke-free zone policy by 42.90%. In order for respondents to be more supportive, it is necessary to form a team involving community leaders to conduct socialization. This is based on smoking behavior is not an easy thing to prevent because it is related to behavior and culture.

The implementation of the No Smoking Zones policy should have been implemented because more than half, namely 59.5%, stated that the no smoking zone policy was effective.

The application of this smoking-free area will be able to reduce diseases directly related to smoking such as heart disease, stroke and other diseases. The government is expected to be able to implement this smoke-free area starting from government offices including the Balangan DPRD by giving sanctions to employees who do not comply with regulations. Smoking is their right, but they also have to respect the rules for the people, meaning that in areas where there are no smoking areas, there are no smoking advertisements and also no one who sells cigarettes, if this is still encountered then sanctions must be enforced. With this sanction, it will deter lawbreakers. In order for the public to understand the implementation of this smoking-free area, it needs to be supported by the promotion of smoking-free areas, and the promotion of cigarettes should be the Regional Head must be committed to the regional regulations he issued, namely no more cigarette promotion in the form of cigarette advertisements on the streets.

The level of compliance with smoking-free areas in Balangan Regency shows that 64.30% are obedient. This shows that the policies implemented are effective, and are supported by the effectiveness of their implementation at 59.5%. According to Dwidjowiyoto (2008), adherence to a legal product is caused in addition to self-awareness of the dangers of smoking, as well as the threat of sanctions for violators, as well as shame when violating the law in front of co-workers and other people around them.¹³

According to Dwidjowijoto (2008) emphasizes that the meaning of a policy is: "To implement public policy, there are two steps available, namely directly implementing in the form of a program or through the formulation of derivative policies or derivatives of the public policy which are in line with the policy concept". Public policies in the form of laws or regional regulations are types of public policies that require explanatory public policies or are often termed implementing regulations. Public policies that can be directly operational include the Presidential Decree, the Presidential Instruction, the Ministerial Decree, the Decree of the Head of the Service, and others. Implementation on the other hand is a complex phenomenon which may be understood as a process, an output or as an outcome. As a process, implementation can be seen as a series of decisions and actions aimed at making policy decisions run. In the context of outputs, implementation looks at the extent to which planned objectives are supported, such as the level of budget expenditures for a program. At

the highest level of abstraction, implementation results mean that there have been changes that can be measured after the policy or program was launched.¹³

Based on the results of this study, it shows that the significance value of the variables of Socialization (0.024), Policy (0.004), and Compliance (0.017), where it can be concluded that the variables of Socialization and Policy and Compliance have a significant effect on the Effectiveness of the Implementation of KTR Regional Regulations in Balangan Regency.

CONCLUSION

The conclusion of this study is that there is an effect of smoking-free area socialization, smoking-free area policy, and non-smoking area compliance on the effectiveness of implementing regulation on non-smoking areas at Balangan District Health Center. Then there is no influence of the no-smoking area budget on the effectiveness of implementing regional regulations for no-smoking areas at the Balangan District Health Center. Furthermore, policy is the dominant variable that influences the effectiveness of the implementation of regional regulations for no smoking areas at the Balangan District Health Center.

REFERENCES

1. Kementerian Kesehatan Republik Indonesia. Profil Kesehatan Indonesia Tahun 2016. Jakarta: Kementerian Kesehatan Republik Indonesia; 2017.
2. Kementerian Kesehatan Republik Indonesia. Hasil Riset Kesehatan Dasar Tahun 2013. Jakarta: Kementerian Kesehatan Republik Indonesia; 2013.
3. Azmi. Hubungan penerapan Kawasan Tanpa Rokok (KTR) dengan Perilaku Merokok Mahasiswa Kesehatan Masyarakat di Kota Semarang. *Jurnal Kesehatan Masyarakat (e-Journal)*. 2016; 4(3): 995-1004.
4. Kementerian Kesehatan Republik Indonesia. Profil Kesehatan Indonesia 2016. Jakarta: Kementerian Kesehatan Republik Indonesia; 2017.
5. Dinas Kesehatan Kabupaten Balangan. Profil Kesehatan Kabupaten Balangan Tahun 2016. Dinas Kesehatan Kabupaten Balangan; 2017.
6. Dinas Kesehatan Provinsi Kalimantan Selatan. Kode Etik Koalisi Profesi Kesehatan Anti Rokok (KPK-AR). Dinas Kesehatan Provinsi Kalimantan Selatan. Banjarmasin; 2017.
7. Azkha. Studi Efektivitas Penerapan Kebijakan Peraturan Daerah Kota Tentang

- Kawasan Tanpa Rokok (KTR) dalam Upaya Menurunkan Perokok Aktif di Sumatera Barat Tahun 2013. *Jurnal Kebijakan Kesehatan Indonesia*. 2013; 2(4): 171-9.
8. Mardhiati. Dukungan Perokok dan Bukan Perokok terhadap Kebijakan Pengendalian Tembakau di Kota Denpasar dan Yogyakarta. *Jurnal ARKESMAS*. 2016; 1(2): 75-82.
 - Latif. Praktik Cerdas Pemanfaatan Pajak Rokok Di Provinsi Kalimantan Selatan Dalam Rangka Diskusi Panel Kenaikan Cukai Dan Harga Rokok Sebagai Instrumen Pengendalian Tembakau Pada Indonesian Confrence on Tobacco of Health (ICTOH). Jakarta: TCSC IAKMT; 2017.
 10. Dinas Kesehatan Kabupaten Balangan. Profil Kesehatan Kabupaten Balangan Tahun 2017. Dinas Kesehatan Kabupaten Balangan; 2018.
 11. Lameshow. Besar Sampel dalam Penelitian Kesehatan (Terjemahan). Yogyakarta: Gadjah Mada University Press; 1997.
 12. Sunarno, Siswanto. Hukum pemerintahan daerah di Indonesia. Jakarta: Sinar Grafika; 2006.
 13. Dwidjowijoto RN. Public Policy. Jakarta: Elek Media Komputindo; 2008.