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REVIEWS

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Current activities in smokes-free zone policy: a tobacco control care reviews in Indonesia

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A – Study Design, **B** – Data Collection, **C** – Statistical Analysis, **D** – Data Interpretation, **E** – Manuscript Preparation, **F** – Literature Search, **G** – Funds Collection

Summary Although the Republic of Indonesia's government has not yet ratified the World Health Organization's Framework Convention on Tobacco Control (WHO FCTC), this nation has started to implement tobacco control care by establishing smoke-free zones (SFZs). We describe and explore the current SFZ activities in Indonesia as well as briefly reviewing tobacco control care in developing countries by examining several documents on the current activities and programs related to SFZ implementation policy in Indonesia. We find that there is evidence supporting current primary activities on tobacco control care, including smoking prevalence, regulation, objectives, and the target of SFZ implementation in Indonesia. The policy introduced seven SFZs, including healthcare facilities, educational settings, children's playgrounds or gathering places for children, places of worship, public transportation, workplaces, and public places. Several developed countries such as the United States have implemented a well-packaged and well-delivered SFZ policy with effective socialization. However, a mutual perception issue is emerging in implementing this policy well from central to local government policies. This essential matter requires study, as there is limited evidence on the barriers and outcomes of its comprehensive implementation.

Key words: tobacco, smoking, tobacco smoke pollution, public health, health policy.

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Background

Indonesia is the only one of the six largest developing countries that has not ratified the World Health Organization's Framework Convention on Tobacco Control (WHO FCTC) [1–3]. However, the Indonesian government has already recognized that the right to live without air pollution could be impacted by tobacco use [3, 4]. Secondhand smoke (SHS) is an established risk factor for several global health problems [5–8], particularly in Indonesia [4, 9]. The Tobacco Control Support Center of the Indonesian Association of Public Health Experts (TCSC-IAKMI) released a national report that ascertained the "non-smokers' right to inhale fresh air is more important than the smokers' right to pollute the air which is poisoned for others [10]."

Cigarette smoke that is inhaled into a smoker's lungs is called mainstream smoke (MS), while cigarette smoke emitted from the burning cigarette is called side-stream smoke (SS) [11]. SS and air pollution are both indicated as environmental tobacco smoke (ETS), which is inhaled as secondhand smoke (SHS) by exposed people [11]. Several studies have assessed that the chemical content of SS is more damaging than that of MS, as the latter is produced by tobacco burned at a lower temperature and is exhaled [12, 13]. Indeed, the International Governmental Coalition Against Tobacco (INGCAT) has issued a recommendation supported by over 60 countries about the dangers of ETS, which totally affect both adults' and children's pulmonary and cardiovascular systems [14].

Smoking prevalence among men in Indonesia was 65.6% in 2007, 65.9% in 2010, and 68.8% in 2013. On the other hand, the prevalence of smoking among women was 5.2% in 2007, 4.2% in 2010, and 6.9% in 2013 [15, 16]. This smoking creates SHS exposure for 76.8 million people [15], and their number is likely to increase along with the increase in active smoking. In 2013, 81% of Indonesian children aged 13–15 years reported exposure to SHS in public places, which is the highest prevalence in the world [17].

In Indonesia, the total number of tobacco-related deaths in 2013 was estimated at 240,618, or 659 Indonesians per day [18]. The tobacco death toll falls disproportionately on men, as it is responsible for more than 21% of all male deaths. Even though fewer women die from tobacco in Indonesia (just over 7% of all female deaths), tobacco still kills 967 women every week [19]. Many of these women are mothers and wives taking care of families, and their deaths impose a huge burden on the families affected.

Otherwise, cigarette smoke is well-known to cause several abnormalities and diseases in most organs, such as stroke; changes in brain chemistry; cancers of the mouth, lip, throat, and larynx; arterial weakness; cardiac disease; chronic lung obstructive disease; lung cancer; asthma; liver cancer; stomach cancer; pancreatic and colon cancers; impotence; cervical cancer; and infertility [20].

In 2016, the WHO released an international report regarding the Republic of Indonesia's policies on and achievements in tobacco control. This report profile indicated that there are incomplete SFZ laws in public places such as government facilities, indoor offices and workplaces, restaurants, and pubs [21]. Meanwhile, several public places have already SFZ laws, but with only moderate compliance, including healthcare facilities and educational facilities except universities, as well as with low compliance at universities and on public transport. However, subnational laws on SFZ exist supporting their national regulation [21].

Table 1. Objectives and targets of SFZ implementation in Indonesia [22]

Objectives	Targets	
	General	Specifics
1. Decrease morbidity and mortality rate while changing society's behavior for a healthy life. 2. Increase the optimal productivity. 3. Realize fresh and healthy air quality free of cigarette smoke. 4. Decrease smoking rate and prevent early smoking adoption. 5. Realize a healthy youth generation.	1. Public transportation	Management of transportation supporting facilities such as cafeterias, entertainment facilities, etc.
		Employees
		Drivers and crewmen
		Passengers
	2. Workplaces	All directors and managers of supporting facilities, such as cafeterias, stores, etc.
		Employees
		Guests or users
	3. Healthcare facilities	All directors and managers of healthcare facilities
		Patients
		Visitors
		All kinds of health workers
	4. Learning environments	All sections and levels of school principals and managers of learning facilities
		Students
		Teachers/lecturers
		Schools' employees and staff
	5. Children's playgrounds	All directors and managers of playgrounds
		Guests and visitors
	6. Places of worship	All religions' priests (imam, kyai, alim ulama, etc.) and managers of worship
		Congregation (jemaat)
		Societies around the places of worship

Furthermore, in this report, the WHO assessed the MPOWER measures, including (1) monitor tobacco use and prevention policies; (2) protect people from tobacco smoke; (3) offer help to quit tobacco use; (4) warn about the dangers of tobacco; (5) enforce bans on tobacco advertising, promotion and sponsorship; and (6) raise taxes on tobacco.

In the current study, a rapid assessment procedure (RAP) was undertaken to describe the implementation of SFZ in Indonesia by reviewing several documents on the current activities and programs related to SFZ implementation policy. These files comprised government acts and regulations towards SFZ application in Indonesia. Ethical approval of the study was obtained from the Expert Commission on Research and Research Ethics of the Public Health Faculty of Universitas Indonesia, No. 2901/ /UN2.F10/PDP.04.00/2015.

Indonesian tobacco control care systems

Indonesia has already introduced regulation related to smoke-free zones (SFZs), as stipulated by Governmental Act No. 36/2009, article 115, paragraph 1. It introduced seven SFZs, including healthcare facilities, educational settings, children playground or gathering places for children, worship places, public transportation, workplaces, and public places (Table 1).

The second paragraph of this act also obligated local governments to set SFZs in each of their territories. One of the important steps in this regulation was the memorandum of understanding (MoU) between the Ministry of Health (MoH) and the Ministry of Home Affairs, which resulted in both Ministers' Decision No. 188/MENKES/PB/I/2011 and No. 7/20111 about the guidelines for SFZs.

SFZs in developed countries

In most developed countries, smoking bans are well implemented. For instance, New York City, USA, has banned smoking in public places, particularly in pubs, restaurants, and cafeterias [23]. Furthermore, these findings were discussed in MoH's report, which mentioned that successful terms of implementation of the regulation included that everyone involved should know and support who guilted, protected, made, supervised, and enforced the rules. It should also be well packaged and well delivered for effective socialization [24]. These national guidelines recognized that smoking not only impacts diseases but also influences health expenditures, which are not worth it [25, 26].

Furthermore, it also formulated as the Government Act No. 109/2012 about Security of Ingredients Containing Addictive Substance in the form of Tobacco Products for Health as part of a legitimate national regulation for SFZ implementation in Indonesia [22, 27]. In other countries, several regulations have been enacted with easy-to-understand appendixes. For example, in New York City, the guideline for the implementation of the Clean Indoor Air Act (2008) was presented in popular language in a question and answer format as follows [28]:

What is there mainstream smoke (MS)?
Where are people forbidden to smoke?
Where are people allowed to smoke?
How is the law enforced?
Where am I supposed to report to if there is any violation?
Is there always a smoking ban in a no smoking area?
What are the legal punishments?
Where I can find information about it?
Where I can find information if I want to stop smoking?

Moreover, both the Netherlands and the United Kingdom have regulated tobacco consumption with an expensive excise rate, calculating the cost of tobacco products in detail. The Dutch government set the excise rate of cigarettes using the *ad-volarem system* and that of chewing tobacco based on weight, as with cigars [29]. The ad-volarem system enables the government to escalate the tobacco excise percentage along with its increasing consumption without any upper limit, while in Indonesia, the excise rate has been set not to exceed 57% excise escalation. Although tobacco consumption in Indonesia has es-

calated by two times or more, the tobacco excise is earmarked at a maximum of 57% [30].

Meanwhile, the determination of excise in the UK is not much different than in the Netherlands, since both of these countries are members of the European Union (EU) and are obligated to use the tobacco excise regulation set by the EU (Table 2). However, the UK government conducts annual changes for their Finance Act, including refreshing tobacco finance policies [31].

Table 2. Tobacco excise policies in the Netherlands and the UK [29, 31, 32]

Netherlands	UK
• Cigars: ad valorem, 5% of the sale price; • Cigarettes: ad valorem, 5% of the special sale and customs price of €166.46 per 1,000 pieces, provided the minimum amount of customs is at least €181.59; • Tobacco cigarettes: special excise of €99.25 per kilogram.	Tobacco Products (Finance Act 2017, Article 22 Paragraph 2): The following rate changes took effect March 8, 2017: a) cigarettes of the same amount as 16.5% of the retail price plus £207.99 per thousand cigarettes, b) cigars of £259.44 per kg, c) hand-packed cigarettes of £209.77 per kg. Other types of tobacco cigarettes and chewing tobacco have a rate equal to £114.06 per kg.

Role of Family Practitioners in the prevention of tobacco smoking

practitioners' role in recent days is to adequately impress on their patients, particularly those families with smokers in their households, the importance of community well-being with fresh air for a healthier environment [33, 34]. In many ways, patients may be influenced to improve their health conditions by communication with proactive practitioners [35], including doctors and nurses giving information about smoking cessation to smoker patients and their families [36]. This strategy is considered an effective approach to decrease smoking incidence among families, as most patients will find it hard to refuse practitioners' advice for their healing processes, especially in smoking-related diseases.

In the Indonesian Health Act No. 36/2009, article 63, point 3, doctors and nurses, including family practitioners, are supposed to control, treat, and care for their patients and are responsible for their patients' health [37]. This regulation gives every family practitioner the opportunity to give comprehensive primary care, which includes preventing smoking behavior as an inseparable part of patient health outcomes [38]. In fact, smoking behavior is responsible for more than 67% of disease in Indonesia [39]. Thus, it can be inferred that Indonesian family doctors and nurses play important roles in not only delivering integrated primary care to patients for their illnesses but also communicating healthy lifestyle behaviors, including ceasing smoking, to their patients.

Future of tobacco control care in Indonesia

MoH's SFZ guidelines are part of the national effort to protect non-smokers from exposure to cigarette smoke. SFZ implementation policies have been identified as a primary intervention strategy not only to control tobacco itself but also to restrain communicable diseases [40]. Fortunately, SFZ implementation in Indonesia was followed by 49 local regulations in December 2014 that comprised 102 municipalities and 13 provinces [10].

SFZ implementation has already been legislated in Indonesia. However, it must be perceived in the same way by national and local governments, such as on the municipality and provincial levels, in order to implement these programs and activities well. Further studies need to consider the barriers to and outcomes of its implementation comprehensively.

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