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The Reality of Smoke-Free Area Policy in Healthcare: "Case Study in The Special Lung Hospital of North Sumatra Province, Medan, Indonesia"

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Abstract

Background: The Special Lung Hospital of North Sumatra Province, Medan, Indonesia is mandated by city regulations to implement the Smoke-Free Area (SFA) policy. In the fact, smoking by visitors and security personnel still occurs, posing health risks to patients and staffs. However, smoking activities by visitors and security staff were observed, posing health risks to patients and employees. This study aims to analyse the implementation, challenges, and possible solutions related to the SFA policy.

Methods: Using a qualitative case study design, six informants were interviewed, including the Hospital Director, Health Safety Environment Committee, security staff, employees, cleaning staff, and visitors. Data were collected through interviews, observations, and documentation, with triangulation used to ensure validity.

Result: The study indicates that, although the policy has been implemented, its effectiveness remains limited due to weak communication, insufficient resources, a lack of commitment, and an inadequate bureaucratic structure. Major obstacles include poor coordination with the government in Medan, limited no-smoking signage, low compliance and awareness among staffs, a lack of a dedicated task force, and weak law enforcement without clear sanctions.

Conclusion: Additionally, socialization and outreach regarding SFA regulations remain minimal. To strengthen implementation, proposed solutions include improving interagency communication, enhancing enforcement and signage, issuing a director's circular, reactivating cessation clinics, and fostering collaboration among hospital units to promote and supervise continuous SFA.

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INTRODUCTION

Smoking remains one of the most prevalent forms of tobacco consumption worldwide. Approximately 80% of the 1.3 billion tobacco users live in low- and middle-income countries (Fitzpatrick et al., 2022), where tobacco-related diseases continue to impose a substantial public health burden. Globally, one person dies every six seconds from tobacco-related causes, and tobacco accounts for one in every ten adult deaths (WHO, 2017). Exposure to tobacco smoke is particularly harmful to vulnerable populations, including children—an estimated 65,000 children die annually due to diseases linked to second-hand smoke (Mahtani et al., 2024).

In Indonesia, smoking remains a major public health and socio-economic issue encompassing health, social, and policy dimensions (Peacock et al., 2018). The government has implemented various strategies to mitigate smoking-related harm, including restrictions on smoking in public spaces and workplaces. Furthermore, local governments are authorized to establish smoke-free area (SFA) policies within their jurisdictions to protect non-smokers and promote healthier environments (Teed et al., 2024).

Tobacco use contributes to 59.6% of cancer cases, including tracheal, bronchial, and lung cancers, 59.3% of chronic obstructive pulmonary disease (COPD) cases, 28.6% of heart disease, 20.6% of diabetes mellitus, and19.7% of stroke (Cioboata et al., 2025). According to data from Statistics Indonesia (BPS), the smoking prevalence among individuals aged 15 years and older was 28.69% in 2021, declined to 28.26% in 2022, and slightly increased to 28.62% in 2023. North Sumatra Province demonstrated similar fluctuations, with smoking prevalence at 27.24% (2021), decreasing to 25.32% (2022), and rising again to 26.28% (2023) (BPS, 2018).

Law No. 17 of 2023 on Health, which requires local governments to create and implement Smoke-Free Zones (SFZs) under Article 151(2), supports the national tobacco control regulatory framework. According to Article 435(2), violations of these zones are subject to fines of up to IDR 50,000,000 (Kemenkes RI, 2023). To safeguard the public's right to clean air and ensure a tobacco-free environment for future generations, this law upholds previous regulations, such as Government Regulation No. 109 of 2012 on the Control of Addictive Substances Containing Tobacco Products (Presiden RI, 2023). At the local level, the City Government has enacted Regional Regulation (Perda) No. 3 of 2014 on Smoke-Free Areas to protect residents from the harmful effects of tobacco smoke. The regulation applies to seven designated public settings, including healthcare facilities, educational institutions, playgrounds, places of worship, workplaces, public transportation, and other public areas. As part of this effort, healthcare institutions—particularly hospitals—are expected to play a leading role in implementing and modelling compliance with SFZ policies (Garritsen et al., 2022).

The hospital conducted a preliminary survey in January 2024, which revealed discrepancies between policy and practice. The hospital has publicly established a smoke-free policy and acknowledges the local government's smoke-free ordinance; however, enforcement remains lax. Cigarette butts, cigarette sales in the hospital canteen, and continuous smoking behaviour by visitors and security staff were all noted. There was no specific task force to oversee adherence, and anti-smoking materials, such as banners and posters, were seldom seen.

These findings highlight a significant gap in implementation between existing regulations and actual practice. Key barriers include inadequate facilities, lack of enforcement mechanisms, limited public and staffs awareness, and weak institutional oversight. Behavioural factors such as poor attitudes and low awareness of smoking risks further undermine compliance. Consequently, smoking persists even within hospital environments that should exemplify smoke-free practices. This study, therefore, aims to examine the implementation of the smoke-free area policy at the hospital, and to identify the challenges and enabling factors that affect its effectiveness.

METHODS

The qualitative study design was selected to provide an in-depth, holistic, and contextualized understanding of the complex

dynamics involved in policy implementation within a single setting at The Special Lung Hospital of North Sumatra Province.

Informants in the study include the Director (P-01), health workers and staffs (P-02), the Health, Safety, and Environment representative (P-03), security staff, janitors, and visitors or family members of patients at the hospital.

To analyze the hospitals implement the Smoke-Free Area legislation, the study combines three theoretical approaches. By analyzing input variables (policy, SOPs, facilities, and human resources) and processes (socialization, supervision, and sanction enforcement), Van Meter & Van Horn's approach is utilized to evaluate how well the policy has been implemented (Phetphum et al., 2025).

The amount of public and relevant staffs knowledge, attitudes, and behaviors for smoke-free zones is among the behavioral barriers impeding policy implementation that are investigated using the Knowledge, Attitude, Practice (KAP) approach. Through evaluation phases and policy improvement recommendations—such as boosting socialization, offering supportive facilities, bolstering supervision, and imposing stringent sanctions the Policy Cycle framework was utilized in the meantime to provide a solution perspective. By combining these three theories, a thorough analysis is produced that not only assesses implementation but also pinpoints obstacles and suggests tactical measures to establish a smoke-free hospital.

The study was conducted in accordance with ethical guidelines to ensure the safety, privacy, and comfort of each informant (Denny & Weckesser, 2022). Consent was obtained from each informant before data collection. All participants gave their consent to participate in the study, which was entirely voluntary. (Massey & Cain, 2024)

The study received ethical clearance from the Health Research Ethics Committee Universitas Sari Mutiara Indonesia, ethical exemption No.4034/F/KEP/USM/VIII/2024

Data Collection

This study employed data collection techniques that included observation, interviews, and documentation (Denny & Weckesser, 2022). The aspects observed are whether there are: people smoking in the hospital premises during breaks, at night, or when there is no supervision; no-smoking signs; staffs reprimanding violators; and cigarette butts.

Interviews are a data collection technique that involves direct interaction between researchers and research participants(Ratschen et al., 2008). The aspects explored are: the Smoke Free Area policies, the socialization of Smoke Free Areas, supporting facilities and infrastructure for their implementation, the enforcement of sanctions against violators, the imposition of fines, and the challenges in implementing Smoke Free Areas.

In this case, the documentation included are the pictures of the hospital condition, such as the smokers in the hospital corridor, cigarette butts, ashtrays, and interview reports.

Data analysis techniques involve the systematic compilation of data obtained from interviews, observations, and documentation (Stickley et al., 2022).

RESULTS AND DISCUSSION

Despite having a legal foundation and institutional support, the Smoke-Free Area (SFA) policy in hospitals faces several challenges in implementation. These challenges include inadequate internal oversight, lax penalties for infractions, and a lack of understanding and discipline among certain staffs and visitors. According to the implementation analysis, despite being technically constituted, the SFA policy is seriously hindered by substantial behavioral obstacles among stakeholders and institutional laws in enforcement.

The thematic analysis table is presented in the table below.

Table 1. Thematic Analysis Table

Theme	Sub-Theme	Code	Quote
Implementation of smoke free area policy	the lack of SOPs and regulations in hospitals,	no fixed rules	I am not familiar with the contents of Medan City Regulation No. 3 of 2014, but I am aware of the smoke-free policy.
	no strict sanctions	only a verbal warning	We have never imposed fines, but we will do so if necessary to reinforce the regulations. However, we may need to discuss this further with management to implement fines as stipulated in government regulations.
Minimal supporting facilities	no smoking signs	banners and stickers are ineffective	There are several stickers, but they are ineffective because people already know that smoking is prohibited but continue to smoke anyway." (LN, HSE
	There is no designated smoking area.	Absence of facilities for smokers	" It becomes unclear if we provide a specific smoking place". (HSE, LN)
Resources Still Needs Improvement	The role of security staff and HSE is not yet optimal	Lack of supervision	" We only give verbal warnings." (IZ, Security Guard)
Ineffective Socialization	Only via WhatsApp	No direct interaction	"Socialization is only through WhatsApp, there is no face-to-face meeting or direct explanation." (JS, Director)
	Not everyone reads messages	Passive Communication	"Not everyone reads messages in PDF format, so they don't know the rules." (AF, Employee)"
Violations of the policy Still Occurring	Smoking in hospital areas	No regular supervision	" Many people still smoke in the cafeteria, security guard post, and corridors. (Direct observation)

Implementation of KTR Policy Input Variables (Policy, SOPs, Facilities, And Human Resources)

The hospital has established a Smoke-Free Areas policy in accordance with the City Regulation No. 3 of 2014. However, the policy has not been implemented optimally because there has been no follow-up in the form of internal regulations or hospital decrees. Based on an interview with P-01, it was stated that the hospital is not a suitable place for smoking, especially since the government has established regulations regarding smoke-free zones. The implementation of the smoke-free area policy can be seen from the following interview results with P-01:

> "In public places, especially hospitals, smoking is prohibited because there are government regulations against it. Hospitals are definitely not suitable places for smoking, but there are still people who smoke".
>
> P-03, as Health Safety Environment at this Hospital, stated that he is aware of the smoke-free zone policy at the hospital but lacks a detailed understanding of the policy and its regulations as explained."
>
> "I am not familiar with the contents of Medan City Regulation No. 3 of 2014, but I am aware of the smoke-free policy."

Based on the response from P-01, Director stated that information regarding the Medan City Regulation on smoke-free areas was conveyed through written messages and that the hospital would distribute these messages to ensure consistency. The lack of clear SOPs suggests that, to ensure the successful implementation of smoke-free area, needs to implement significant managerial and operational reforms. The lack of supporting facilities as indicates that the implementation of smoke-free areas in hospitals is not yet optimally supported by adequate facilities. The absence of no-smoking signs in strategic locations means that visitors and health workers do not receive sufficient visual warnings.

The informants' responses support the photo, which shows that the facilities and infrastructure to support the smoke-free policy

are still limited. Based in interview" There are no facilities, because the hospital just moved in 2023, which is part of the management, and the services will only move at the beginning of 2024." (P-01)

> "If we provide a special smoking area, it's not possible because it becomes ambiguous, meaning that we are providing facilities for smoking. If you don't smoke, then don't smoke at all. More decisive action is needed. As for the stickers, there are a few, but they're not particularly effective because people are already aware that smoking isn't allowed in the hospital. However, they still smoke anyway because no fines have ever been imposed. There's no special task force to enforce it, so they just ignore it because there's no dedicated agency handling smoking-related issues." (P-03)

Based on a statement from P-01, the director stated that there are no facilities or infrastructure, as the hospital only moved in 2023 and began operations at the start of 2024, it was supported by a statement from P-02, the employees stated that the hospital does not have any facilities or infrastructure. In line with the opinion of P-01, the Health, Safety, and Environment team, which stated that providing a designated smoking area is not an effective solution, as it will only lead to confusion and inconsistencies in the implementation of smoke-free zone regulations.

The lack of socialisation of the smoke-free area policy, which relies solely on WhatsApp messages, shows that efforts to disseminate information are still not comprehensive and practical. The absence of direct (face-to-face) communication also poses a challenge, as there is no opportunity to provide explanations, clarifications, or answer questions from staffs or visitors. Additionally, the absence of visual communication tools such as banners, posters, leaflets, and prohibition signs in strategic areas means that smoke-free area messages are not visible to those who should be following the rules. Based on the response from P-02, the employees at the Health Safety and Environment area stated that there is a cooperation between units, such as the Health Promotion and Health Safety and Environment area, which can be incorporated into the health promotion hospital programme to conduct socialisation and education on smoke-free areas together with Health Safety and Environment for employees and patients.

This circumstance highlights the inadequacy of law enforcement in enforcing the smoke-free area at the hospital. Existing restrictions have no deterrent impact because there are no internal consequences or fines in line with Local Regulation No. 3 of 2014, which implies that infractions persist. Verbal warnings are the only action taken, and even then, they are rarely followed, which suggests that staffs members are not truly committed to upholding the guidelines. Additionally, punishments are applied inconsistently and without precise criteria when Standard Operating Procedures (SOPs) about enforcement methods are lacking.

Barriers (Knowledge, Attitudes, Practices)

Knowledge

Most visitors and staffs, such as security staff who are supposed to act as supervisors, are unaware of the details of the regulation. It because the information provided by the city government is only communicated via WhatsApp messages, which are passive in nature and do not guarantee that all parties read or understand the content. Without face-to-face outreach efforts, training staff, and engaging, easily accessible educational materials, public awareness and healthcare workers' awareness will remain low, making violations of the smoke-free area regulations likely to continue (Hoe et al., 2021).

Attitude

According to the study's findings, staffs, visitors, and relatives of patients generally tolerate smoking, despite the presence of smoke-free areas. This mindset stems from a lack of knowledge about the health risks associated with smoking, social norms that consider smoking to be regular, and a weak culture of discipline in medical settings. (Tumolo et al., 2024).

Additionally, some people believe that smoking restrictions are mainly formalities with no real repercussions for violators. This impression stems from the fact that current regulations are rarely applied consistently, rendering infractions ineffective in discouraging repeat offenders. (McCrabb et al., 2017).

Furthermore, the hospital administration has not demonstrated a significant commitment to promoting the establishment of smoke-free settings. This is demonstrated by the absence of defined monitoring systems, internal socialization among staffs, and staff in the certain area who responsibility to comply (Suhadi et al., 2025).

Practice

Smoking remains prevalent in hospital facilities, even in designated smoke-free areas such as canteens, hallways, and security posts. This indicates weak enforcement of smoke-free policies. The lack of designated smoking zones often leads individuals to smoke anywhere without regard for patients or visitors, undermining the hospital's commitment to maintaining a healthy environment.

Moreover, the absence of strict penalties for violations renders smoke-free regulations ineffective in changing behavior. When repeated infractions go unpunished, people feel free to disregard the rules. The practice of security staff and non-medical staff smoking on hospital grounds further sets a poor example for visitors, diminishing both the credibility of the policy and the team's efforts to promote a smoke-free atmosphere.

Barrier

The implementation of the smoke-free area policy at the hospital. One major obstacle is the lack of clear internal regulations and Standard Operating Procedures (SOPs) to guide policy enforcement. Although local laws exist, hospitals have not developed detailed instructions or mechanisms for monitoring, imposing penalties, or defining responsibilities. As a result, enforcement is weak, violations go unchecked, and the policy remains largely normative rather than practical, leading to ineffective outcomes (Rosmayanti & Permana, 2024).

In addition, poor infrastructure and limited awareness among staff and visitors further hinder the success of smoke-free initiatives. The absence of visual materials, such as banners, posters, and pamphlets, reduces communication about smoking bans. In contrast, the lack of designated smoking areas encourages rule-breaking in public spaces, including canteens and hallways (Rijhwani et al., 2018). Compounding the problem, low awareness of Local Regulation No. 3 of 2014, permissive attitudes toward smoking, and minimal government support or funding for educational activities weaken implementation efforts. These issues underscore the need for enhanced coordination, improved facilities, and ongoing education to promote behavioral change and ensure the effective enforcement of smoke-free policies (Principe et al., 2014).

KTR (Smoke Free Area) Policy Solutions

The Knowledge, Attitude, and Practice (KAP) approach helps identify challenges in enforcing smoke-free policies. Ongoing smoking among staff, visitors, and even medical professionals—combined with permissive attitudes and low awareness of Local Regulation No. 3 of 2014—shows that behavioral change remains limited. Weak supervision and the absence of strict penalties worsen the problem (Siregar, 2022). To improve compliance, hospitals should strengthen SOPs, enforce fines, train staff, and intensify education through media and community outreach. Collaboration with the Medan City Government, clear signage, cessation clinics, and sustainable funding are also vital to support effective smoke-free programs (Adina et al., 2025).

CONCLUSION

Although supported by the city regulation No. 3 of 2014, the implementation of smoke-free policies at the hospital remains suboptimal. Key challenges include weak supervision, lack of internal regulations and SOPs, inadequate facilities such as designated smoking areas and signage, and limited human resource capacity. Security and HSE staff are not fully trained to enforce rules, with oversight often limited to passive communication and verbal warnings, rather than proper sanctions. Low awareness, permissive attitudes, and continued smoking among staffs and visitors further hinder progress, compounded by insufficient government support and funding delays. These issues underscore the urgent need for clear internal regulations, enhanced infrastructure, capacity building, targeted education, strict enforcement, and consistent monitoring to achieve a truly smoke-free hospital environment.

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