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COMMUNITY PARTICIPATION IN PREVENTING THE SPREAD OF SMOKING HABITS IN THE SURROUNDING ENVIRONMENT

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Abstract

The prevalence of smoking in Indonesia is very high and has become a public health problem. According to 2023 WHO data, the proportion of cigarettes among the adult population (15+) in Indonesia reached around 34.5%. To address this, the role of the community is essential as a proxy for behavior change. This study reviewed literature and secondary data (WHO, the Indonesian Ministry of Health, BPS, and academic studies) to understand how local community involvement can prevent the spread of smoking. The research method used was a descriptive qualitative study with content analysis of quantitative and qualitative data. The results of the study indicate that community empowerment programs such as anti-smoking campaigns involving community leaders and community-based health education raise awareness and change social norms about smoking (Halim et al., 2024; Sugiyo & Sutrino, 2021). For example, the "Kampung Tanpa Asap Rokok" (Smoke-Free Village) in Surabaya successfully created a smoke-free environment through community mobilization (Sadono & Fatah, 2018). In conclusion, community participation effectively strengthens tobacco control efforts when accompanied by supportive policies, therefore it is recommended to intensify community-based approaches to smoking prevention. (WHO, 2025; Ministry of Health of the Republic of Indonesia, 2024).

Keyword : ***Community Participation, Preventing the Spread of Smoking Habits in the Surrounding Environment***

INTRODUCTION

Smoking is a major health problem in Indonesia. (WHO, 2023; Ministry of Health of the Republic of Indonesia, 2024). WHO stated that in 2021 the prevalence of smoking among the adult population (aged ≥15 years) in Indonesia was around 34.5%, making Indonesia a country with one of the highest numbers of smokers in the world. (Ministry of Health of Indonesia & WHO, 2024). Meanwhile, the Ministry of Health reported in the 2023 SKI that the number of active smokers was estimated to reach 70 million people. (Ministry of Health of the Republic of Indonesia, 2024; Antara News, 2024). The young age group (10–18 years) also showed an increasing trend: from 7.2% (2013) to 9.1% (2018). (Ministry of Health of the Republic of Indonesia, 2021). GYTS 2019 data showed that 19.2% of students (13–15 years) smoked. This situation places Indonesia as the country with the third highest number of active smokers in the world (World Health Organization, 2025). In addition to health issues, cigarette consumption exacerbates poverty: research shows that cigarette consumers are predominantly low-income communities, with cigarette spending often exceeding spending on education or health (Setiyani & Kristiyanto, 2023). This background emphasizes the urgency of smoking prevention. The research problem is formulated as follows: What is the role of community participation in preventing the spread of smoking habits in the surrounding environment? (Sugiyo & Sutrisno, 2021).

THEORITICAL REVIEW

Community Participation. Community participation can be defined as the active involvement of individuals or groups in a shared process to achieve specific goals. In a health context, communities that voluntarily participate

demonstrate empathy and responsibility for shared health programs. According to Histiraludin (in Handayani, 2006), participation is the active involvement of the community throughout the process as a means of fostering solidarity. Therefore, community-based smoking prevention programs require community collaboration in the planning, implementation, and evaluation of health interventions. Behavioral Change. Health behavior theory emphasizes that the repetition of a behavior is influenced by its accompanying consequences. In operant conditioning (Wong, 2013), for example, positive reinforcement increases the likelihood of a behavior continuing, while punishment or negative consequences decrease it. Social cognitive theory (Bandura) adds that the social environment (including community norms) influences behavioral choices through learning and modeling. Therefore, community involvement can shape new norms (negative norms toward smoking) and provide social reinforcement for quitters. The Health Belief Model and the transtheoretical model (Prochaska) also emphasize the importance of understanding risk, motivation, and social support in the smoking cessation process.

Public Health Theory. According to Blum's health determinants model, four factors influence a community's health status: environment, behavior, health services, and heredity. In smoking prevention, environmental factors (e.g., smoke-free policies) and behavioral factors (knowledge and attitudes toward smoking) are interrelated. The public health approach emphasizes primary prevention and population-based health promotion, including the creation of healthy environments (e.g., smoking bans in public places) and mass education. Health promotion (the Ottawa Charter) also prioritizes community empowerment as one of its strategies, recognizing the importance of empowering communities to take control of their health.

RESEARCH METHODS

This study uses a descriptive qualitative method aimed at understanding social phenomena in depth based on available data (Setiyani & Kristiyanto, 2023). This approach was chosen because it can illustrate community participation in complex social and cultural contexts, particularly in smoking prevention (Sugiyo & Sutrisno, 2021). The data used are secondary data obtained from reports from the WHO, the Ministry of Health of the Republic of Indonesia, the Central Statistics Agency (BPS), and several scientific journals related to tobacco control and public health behavior (World Health Organization, 2023; Ministry of Health of Indonesia & WHO, 2024). Data analysis was conducted qualitatively using content analysis techniques, namely identifying themes and patterns from various literature sources (Setiyani & Kristiyanto, 2023; Sadono & Fatah, 2018). Furthermore, this study used a source triangulation approach to validate data from various references to obtain more comprehensive and reliable results (Halim et al., 2024). Data validity was strengthened by comparing results from several official and academic sources (World Health Organization, 2023; Ministry of Health of the Republic of Indonesia, 2024).

RESULTS AND DISCUSSION

Smoking Status in Indonesia. Data analysis results indicate a high prevalence of smoking. WHO (2023) recorded that 34.5% of Indonesia's population (15+) smokes, with a striking gender disparity (around 65.5% of men, only 3.3% of women). Among adolescents (13–15 years), the 2019 GYTS showed 19.2% smoked. The 2023 Indonesian Health Survey (Ministry of Health) estimated 70 million active smokers in Indonesia, including 7.4% aged 10–18 years. This figure is a decrease from 9.1% in 2018, but still above the national target. The 15–19 age group is the largest group of smokers (56.5%). The highest number of active smokers is found in several provinces such as Lampung (33.85%) and West Java (32.98%). These epidemiological data indicate the need for strong intervention because smoking not only threatens health (heart, cancer, COPD), but also burdens the economy of families and the nation.

The Role of Community Participation. Case studies and literature reviews demonstrate that community empowerment can transform the social environment associated with smoking. One successful example is the "Smoke-Free Village" in Bulaksari, Surabaya. Bulaksari residents took the initiative to conduct public awareness campaigns on the dangers of smoking and conduct smoke-free competitions for 1.5 years, leading to the Surabaya City Government declaring the village a smoke-free zone. This approach actively involved neighborhood association (RW), family welfare group (PKK), and youth organizations (karang taruna) leaders in promoting the prohibition on smoking in homes and public places. As a result, residents became aware of the dangers of cigarette smoke, especially for children. An anti-smoking program in Betoambari District (Sulawesi), involving village heads and health workers as community mobilizers, also demonstrated increased awareness among schoolchildren about the risks of cigarette advertising. Studies have shown that sustained public health campaigns, including direct education and local policy support, can significantly reduce smoking prevalence. Theoretically, this community participation is consistent with behavior change theory. For example, awareness-raising and positive reinforcement methods through seminars and creative media increase the likelihood of people quitting smoking. The cognitive socialization approach (Bandura's

theory) supports the selection of community and religious leaders as role models who establish the norm that "smoking is not a normal habit." From Blum's public health perspective, community initiatives create a cleaner physical environment (reducing smoke exposure) and change people's attitudes toward smoking. However, several challenges remain, such as aggressive exposure to tobacco advertising on social media and minimal policy enforcement. Therefore, a combination of community empowerment and public policy (Smoke-Free Areas, excise) is essential.

Side Effects of Smoking on Health

Research shows that both active and passive smoking have serious impacts on various systems in the human body. According to reports from the WHO (2025) and the Indonesian Ministry of Health (2024), cigarette smoke contains more than 7,000 harmful chemicals that can damage vital organs such as the lungs, heart, and brain (World Health Organization, 2025; Indonesian Ministry of Health & WHO, 2024). In the respiratory system, exposure to cigarette smoke causes disorders such as chronic bronchitis, emphysema, and lung cancer. Cigarette smoke irritates the respiratory tract and triggers long-term inflammation, which leads to decreased lung function (Surgeon General, 2014; Siagian et al., 2024). Continuous exposure to secondhand smoke also puts people at high risk of developing pneumonia, asthma, and respiratory tract infections (World Health Organization, 2025; Khgeng & WHO Indonesia, 2021).

Meanwhile, in the cardiovascular system, nicotine increases heart rate and blood pressure, and accelerates the development of atherosclerosis (Centers for Disease Control and Prevention, 2025). As a result, smokers have a higher risk of coronary heart disease, hypertension, and stroke (Institute of Medicine, 2019; Surgeon General, 2014). Research by the CDC (2025) also estimates that approximately 160,000 deaths each year in the United States are caused by smoking-related cardiovascular disorders (Centers for Disease Control and Prevention, 2025). In the nervous system, nicotine stimulates the release of dopamine, which produces a temporary feeling of pleasure, leading to dependence (Peters et al., 2008). Long-term exposure to toxic substances in the brain increases the risk of dementia and cognitive decline (Peters et al., 2008; Siagian et al., 2024). Smoking also increases the risk of stroke, which can lead to permanent brain damage (World Health Organization, 2025).

Another significant impact has been found on the reproductive system. Smoking can reduce sperm quality in men and disrupt hormonal balance in women, thereby reducing fertility (Centers for Disease Control and Prevention, 2025). For pregnant women, smoking triggers complications such as placenta previa and placental abruption, and increases the risk of premature birth and low birth weight (World Health Organization, 2025; Khgeng & WHO Indonesia, 2021). Exposure to secondhand smoke also increases the risk of birth defects and sudden infant death syndrome (SIDS) in babies (Centers for Disease Control and Prevention, 2025; Surgeon General, 2014).

From an immune system perspective, the toxins in cigarettes reduce immune function and increase susceptibility to infectious diseases such as tuberculosis, influenza, and pneumonia (Surgeon General, 2014; Siagian et al., 2024). The toxins in cigarette smoke also cause oxidative stress and chronic inflammation, which disrupt both the adaptive and innate immune systems (World Health Organization, 2025).

Furthermore, children and adolescents are particularly vulnerable to the dangers of cigarette smoke. Children who grow up in environments with smoking parents have a higher risk of respiratory problems, middle ear infections, and delayed cognitive development (Khgeng & WHO Indonesia, 2021; World Health Organization, 2025). The WHO (2025) also confirms that there is no safe level of exposure to cigarette smoke for children. Population-wide, smoking causes a significant socio-economic burden. The cost of treating smoking-related illnesses puts a strain on households, while productivity declines due to increased morbidity (Ministry of Health of Indonesia & WHO, 2024; Siagian et al., 2024). Tobacco control policies such as tax increases, health campaigns, and smoking bans in public places have proven effective in reducing smoking prevalence in various countries (World Health Organization, 2025; Siagian et al., 2024).

CONCLUSION AND SUGGESTIONS

Community participation is a crucial component in preventing the spread of smoking in the community. Community-based interventions, such as educational campaigns, the formation of smoke awareness groups, and the declaration of smoke-free zones, have been shown to raise awareness and change social norms related to smoking. Although the prevalence of smoking in Indonesia remains high, data shows that sustainable strategies involving local residents and community leaders can reduce smoking behavior. Strengthening health promotion programs through community-based approaches (UKBM) at the village/sub-district level is necessary, for example, through regular outreach at Integrated Health Posts (Posyandu), schools, and youth groups. Local governments should expand the implementation of Smoke-Free Zones and involve the community in their oversight. Civil society organizations and

local leaders (including religious leaders) should be actively involved in designing campaign materials that align with local wisdom. Furthermore, mass media and social media should be optimized to creatively disseminate anti-smoking messages. Finally, the collection of health survey data needs to be continued and published to ensure evidence-based evaluation of smoking control policies.

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