e-ISSN : 2597-6052

MPPKI MEDIA PUBLIKASI PROMOSI KESEHATAN INDONESIA

Research Articles Open Access

Communicating Smoke-Free Messages to Children and Women in Rural and Urban Indonesia

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ARTICLE INFO

Manuscript Received: 12 May, 2025
Revised: 20 Aug, 2025
Accepted: 28 Aug, 2025
Date of Publication: 04 Oct, 2025
Volume: 8
Issue: 10
DOI: 10.56338/mppki.v8i10.8056

KEYWORDS

Tobacco-Free Education;
Communication of Smoke Free Message;
Woman and Children;
Urban and Rural

ABSTRACT

Introduction: The increase in cigarette production use in Indonesia has contributed to the rise of non-communicable diseases, affecting both active and passive smokers. Based on the 2023 Indonesian Health Survey around 70 million people in Indonesia smoke actively, with 7.4% of them being between the ages of 10 and 18 years old. Effective tobacco control and public education communications are essential to protect vulnerable populations from the dangers of passive smoking.

Objective: To increase awareness among active smokers, this study analyzed communication messages about the impact of smoking on children and women regarding communication messages as tobacco-free education.

Method: This qualitative study employed Focus Group Discussions (FGDs) involving active smokers from rural and urban areas in Indonesia. Participants were recruited from urban university students living in Surabaya and rural areas of Banyuwangi through online brochures distributed at multiple universities in each region. Eligible participants were both female and male active smokers who had been smoking for the last 3 years, consumed more than five conventional cigarettes, and had used electronic cigarettes more than five times. The study included two discussion groups, each with six participants. Data analysis was using thematic analysis.

Result: Six types of media communications were conducted for each child and woman. The respondents in rural East Java equally favored messages A and C. Regarding the children communication in Urban East Java, most participants preferred message C, whereas one selected message B. Regarding the women's communication, most urban participants chose message C, with two selecting message C and one choosing message B. Most participants acknowledged the adverse health impacts of cigarette smoking on passive smokers. Both rural and urban participants selected communication messages on children's and women's mortality data as impactful for tobacco-free education for active smokers.

Conclusion: Communication messages focusing on children and women can effectively influence the perceptions and emotions of active smokers as tobacco-free education. Media development is needed to convey educational messages that inform both active and passive smokers, encouraging awareness and behavior change.

Publisher: Fakultas Kesehatan Masyarakat Universitas Muhammadiyah Palu

INTRODUCTION

Indonesia ranks third in global tobacco use, following China and India. According to the 2023 Indonesian Health Survey conducted by the Ministry of Health, approximately 70 million Indonesians are active smokers, with 7.4% aged 10–18 years. Tobacco consumption is the second-highest risk factor for death and disability in Indonesia. The long-term health consequences include diseases caused by smoking, which are leading causes of death in middle- and high-income countries, such as coronary heart disease, cancer, and chronic obstructive pulmonary disease (1). Earlier reports showed that smoking was among the leading five main causes of early death in Indonesia, making up approximately 16.2% of all deaths in 2017(2) . Passive smoking involves inhaling cigarette smoke exhaled by others. Cigarette smoke contains 7,000 chemicals, including nicotine and 69 known carcinogens, contributing to 50% of deaths related to long-term exposure. Passive smokers have a 30% increased risk of developing atherosclerotic cardiovascular disease (3). More than 20 studies at the individual level indicate that passive smoking increases the risk of stroke. In China the study showed that te risk of passive smoker to get stroke increase by 21% (4). Women and children are particularly at risk of exposure to secondhand smoke (SHS) in households, leading to various health problems. Effective tobacco control measures and public education communications are essential to protect vulnerable populations from the dangers of passive smoking.

The widespread prevalence of smoking is linked to cigarette marketing, which often presents smoking as a symbol of masculinity, curiosity, toughness, freedom, and courage (5). Consequently, developing impactful public health messages that effectively convey information to all groups, particularly smokers, is crucial to increase awareness, knowledge, and thinking skills and influence emotions to protect women and children from SHS exposure. Perceptions regarding the dangers of smoking and acceptance of messages may differ between rural and urban communities owing to cultural norms, habits, and economic conditions (6). We aim to analyze passive smoking communication messages targeting children and women that can influence smokers' perspectives in rural and urban areas of East Java, as well as the input from smokers regarding communication messages as tobacco-free education.

METHODS

This study employed a qualitative method with thematic analysis to describe and summarize the communication messages for dissemination. Purposive sampling was used to select participants. The study explored communication messages targeting women and children as passive smokers, focusing on their potential to influence their thoughts and emotions.

Participants were recruited from urban university students living in Surabaya and rural areas of Banyuwangi through online brochures distributed at multiple universities in each region. Eligible participants were both female and male active smokers who had been smoking for the last 3 years, consumed more than five conventional cigarettes, and had used electronic cigarettes more than five times. The participants were required to be fluent in Indonesian and be university students in at least their third semester, regardless of their major. Non-smokers, smokers with mental health disorders, and those unwilling to participate were excluded. Participants were informed about the time and location of focus group discussions (FGDs) and were required to provide a contactable phone number. They received a reminder call the day before their scheduled session.

This study was conducted at the state universities in Surabaya and Banyuwangi from May to June 2023. It involved two discussion groups with a total of 12 participants, consisting of six participants each from both Surabaya and Banyuwangi. The participants chose one from six types of communications designed for children and women and provided their opinions. This study was approved by the Health Research Ethics Committee of the Faculty of Public Health, Airlangga University (certificate number 80/EA/KEPK/2023), and all participants provided written informed consent. Participants are shown the types of health communication messages as follows:

Campaign to reduce children's exposure to cigarette smoke

Children exposed to cigarette smoke are 24% more likely to develop asthma. Protect your children; smoke away from them.

Children living with smoking parents are 60% more at risk of lower respiratory tract infections. Keep your child away from cigarette smoke.

Did you know 1,500 Indonesian children die every year due to passive smoking? Avoid smoking inside the house.

Campaign to reduce women's exposure to cigarette smoke.

Every year, 35,000 Indonesian women die due to passive smoking. Spread this information to reject being a passive smoker. Encourage smokers to smoke outside.

Passive smoking causes 18,000 Indonesian women to die each year from cardiovascular diseases. These deaths can be avoided; inform smokers around you to smoke outside.

Do you know women with respiratory issues? Passive smoking causes 3,000 Indonesian women to die every year due to respiratory disorders. Smoke outside to reduce this risk.

Data was collected through FGDs. All potential participants were informed about the research objectives and procedures 1 week before the FGDs. Selected participants read the research information sheet and signed a consent form before participation. To minimize dropouts, an initial approach ensured that participants clearly understood the study's purpose. No participants withdrew from the study at any point.

The FGDs followed a semi-structured format with open-ended questions facilitated by a trained modulator and a notetaker, both experienced in conducting discussions in Surabaya and Banyuwangi. Data were collected offline in the research rooms at Airlangga University's Surabaya and Banyuwangi campuses.

The facilitator and notetaker were responsible for outlining the consent procedures and ensuring that the consent forms were signed before commencing the discussions and collecting demographic information. In addition to leading the discussion, the facilitator clarified any inconsistent, vague, or ambiguous remarks and provided a summary of the FGD content at the conclusion of each section. The notetaker diligently documented the group. A voice recorder was used to capture the FGD data to ensure data accuracy. Additionally, the notetaker was responsible for summarizing the discussion results using a Microsoft Word template specifically designed to streamline answer confirmation at the end of the session.

The facilitators were female research team members with academic backgrounds in health promotion and expertise in qualitative research methods. Participants provided feedback on questions regarding educational communication messages targeting women and children on the health hazards of passive smokers (Fig. 1). They also recalled and evaluated comments on the various communication message options. A standardized topic guide was used during the FGDs to maintain consistency across all the discussion sessions. The FGDs lasted 90 min. Data saturation was monitored during data analysis, and data collection continued until no new themes emerged.

All FGDs were audio-recorded and transcribed verbatim. Facilitators reviewed the transcripts to ensure consistency. The results of the FGDs were transcribed by a transcription expert to label each participant's contributions. The data were then analyzed, segmented into smaller units, and coded. The original transcripts, written in Microsoft Word, were compiled into a table matrix containing key points, respondent identities, and communication message codes to facilitate data analysis. Thematic analysis was conducted by systematically coding the data, identifying emerging themes, and summarizing findings. Triangulation is carried out by matching the explanations from each FGD participant, then discussing and reaching a consensus on the results.

RESULTS

The participants had an average age of 21 years and came from diverse academic backgrounds (Table 1).

Table 1. Participant characteristics

Participant	Age (years)	Sex	Domicile	Study program
R1	23	Male	Banyuwangi	Economy
R2	22	Male	Banyuwangi	Veterinary medicine
R3	19	Male	Banyuwangi	Fishery
R4	21	Male	Banyuwangi	Public Health
R5	21	Male	Banyuwangi	Fishery

R6	22	Male	Banyuwangi	Economy
U1	21	Female	Surabaya	Engineering
U2	22	Male	Surabaya	Science of Humanities
U3	23	Male	Surabaya	Science of Political
U4	20	Male	Surabaya	Economy
U5	19	Male	Surabaya	Economy
U6	20	Female	Surabaya	Science of Political

Perceptions of active smokers regarding communication messages for children

The anti-smoking communication, which highlighted the health impact on children (Fig. 1), had three message options. Participants were asked the following: "In your opinion, which children's communication is the most meaningful?" The participants in rural East Java selected messages A and C in equal proportions. Most participants from Urban East Java selected message option C, with only one participant choosing message option B. Selected participant quotations are presented in Table 2.

Table 2. Selected quotes about the communications for children

Themes	Quotations
Rural	
Triggers	R1: *"I prefer option C because it contains the word death."*
1. Impact of "death"	R2: "*It goes directly to the ultimate outcome, like death, because, in my opinion, the data on child deaths, 1,500, is already quite high."*
	R4: *"Yeah, if it's death, it's just death; there's no later, no percentages, no subsequent diseases; it's just death; it's like a direct hit, oh yes, especially since we already have children, even though I don't have any yet."*
2. Personal experiences	R6: *"Due to exposure to the risks of smoking, 24% are at risk of developing asthma. This is fundamentally tied to experiences within the family, such as cases where a child develops asthma because their parents smoke."*
Idea for the better message	R1: "*Maybe like videos of people suffering from diseases. Research is good too, but maybe it's more like interviewing mothers at home whose families smoke." Usually, they don't like it if their husbands smoke at home.*
1. Testimonial videos from victims	
2. Symbols of death	
3. Social media content	R6: *"Fathers, with their children already wrapped in shrouds, it's more like a threat like that." "We should just present how cigarette smoke initially infects; maybe convey it through animation."*
	R5: *"Social media posts about the dangers of smoke exposure." "Content like short movies about the dangers of cigarette smoke for children."*
Urban	
Triggers	
1. Impact of children death	U1: *"Options A and B still include the word 'risk,' so it could go either way, yes or no. But option C seems more certain because it includes data on deaths."*
	U3: *"In my opinion, option C is more likely to trigger parents because it emphasizes protecting their children from cigarette smoke."*
2. Number of victims presented in numerical data	*U2: "For me, it's because the data is presented in numerical form, which is easier for the general public to understand. For the younger generation, options A and B might be sufficient, but in my environment, for the older generation, it might be more effective if presented like this."*
	U4: "Option C doesn't use percentages, ma'am; instead, it gives a valid number, like 1,500 children. In my opinion, for children, that's already clear enough compared to percentages, which might not be detailed yet."
Idea for the better message	*U2." A picture of a baby, then there's smoke like it's capturing a helpless baby"*
1. Sad messages	***U3:** "A picture of a teenager and his younger sibling, in black and white background, and the teenager is smoking in front of his little brother." "A picture of a young child being treated in a hospital, showing just how dangerous smoking can be."*

Table 2 provides key insights into how active smokers perceive the educational messages conveyed in this study. Most active smokers in both urban and rural areas stated that the phrase "die due to the impact of cigarette smoke on children" was particularly thought-provoking and emotionally impactful. Even participants without

children found this statement compelling. Consequently, the participants emphasized the importance of avoiding smoking inside the home. Both urban and rural participants expressed a preference for messages that use numerical data to illustrate the impact of smoking. This preference suggests that statistical evidence strengthens the persuasiveness of educational messages.

Most participants, both urban and rural, believed that "sad messages" in the form of symbols of death or testimonial videos from victims would be highly effective in influencing active smokers' emotions. Particularly, urban participants emphasized the importance of promoting educational content through social media.

Additionally, urban participants emphasized the importance of messages that resonate with common experiences. They suggested that educational messages should include information about "diseases" caused by passive smoking. Therefore, educational messages incorporating the element of child mortality due to related diseases, along with statistical prevalence, could effectively influence the emotions and perceptions of the participants.

Consequently, based on the analysis, communication message option C was identified as the most effective for educating active smokers about the dangers of exposing children to SHS.

Active smokers' perceptions of communication messages for women

The anti-smoking communication depicting health impacts on children (Fig. 1) had three message options. Participants were asked the following: "In your opinion, which women's communication is the most meaningful?" All participants in rural East Java chose message option A. Meanwhile, most participants from Urban East Java chose message option C, two selected message C and one chose option B. Selected participant quotations are presented in Table 3.

Table 3. Selected quotes about the communications for woman

Themes	Quotation
Rural	
Triggers	
1. Impact of "death"	R1: *"From the start, because for me, death is a frightening reality for smokers."* R4: *"Losing loved ones becomes a source of deep sadness."*
2. Urgency of smoking in the outside (smoking area)	R3: *"So, the goal here is clear, which is to encourage smoking outside."* R5: *"Here, the message is more about advising smokers to smoke outside."* R6: *"It would definitely have an impact on me because when I know and receive information like this, it will probably raise awareness that we can't just smoke anywhere."*
3. Family planning	R5: *"Every man in the future will be with a woman and also a child. So, we must avoid exposing women and children to cigarette smoke."* R1: *"When you become a father, your child could also be a girl, and when you have siblings, they could also be women."*
Idea for the better message	
1. Courage of women in addressing issues	R1: *"So that female smokers can be more courageous in confronting active smokers."* R4: *"Encourage yourself, add it to the women, and then add more words, like..."* R6: *"A group of women could demonstrate against smoking, saying something like 'Don't smoke near me' to make an impact."*
2. Scary visualization	R5: *"It could be added, like the angel of death, or perhaps a mother lying in the background, or a shroud behind her."* R3: *"You could use something like the angel of death, with the typical symbol, like a halo."*
Input for the smoking area	R1: *"When talking about facilities, we should directly involve the government, especially for public places."* *"Instead of fines, it's better to provide designated spaces for smokers first."*

Urban	
Triggers	R2: *"Honestly, I'm against statements that still mention health issues. I prefer something more straightforward, like simply saying death due to smoking."*
1. Death impact	
Idea for the better message	R1: *"And it also informs smokers to smoke outside, which is a new culture that I support, because people have been hesitant to do so until now."*
1. Message for the passive smoker	R3: *"Well, from those last words, it triggers me. I prefer that people become aware first, rather than me having to confront others."*
	R6: *"It could create a new culture, as mentioned earlier, where people speak up, in other words, raising awareness about the dangers of both active and passive smoking."*
2. Object specification	R4: *"For me, it could be added that women should be more specifically mentioned."*
	R5: *"Maybe for women, it would be better to focus on breastfeeding or pregnant mothers."*
Media Communication	R5: *"It's more like a public service announcement."*
1. Public service announcement	R1: *"But for something more general, like something everyone needs, it could be included during events that are meant for the public."*
2. Local event	
3. Music media	R6: *"For the video, I was thinking it could be packaged with music, and the music should be made as heartwarming or easy listening as possible so that it can really resonate. The tone should be crafted to effectively deliver the message."*

Table 3 indicates that the impact of smoking-related deaths among women in Indonesia tends to increase the perceived risk among smokers in both rural and urban areas. The anti-smoking communication message in this study prominently featured the word "died," clearly outlining the impact of cigarette smoke exposure on women as passive smokers. This information provided new knowledge and emotionally influenced the participants.

However, participants from rural areas also emphasized the importance of educating passive smokers, particularly women, when confronting active smokers. In addition to words that evoked sympathy, communication message option A provided a solution-oriented sentence that urged active smokers to smoke in designated areas. The messages of tobacco-free education served a clear purpose; it prompted active smokers to consider the long-term health impact on their families, raising awareness about the importance of protecting their families from harmful cigarette smoke. Respondents highlighted the need for additional information to clarify whether the communication message discriminates against active smokers. To address this concern, they suggested that governments provide specific smoking facilities.

In providing feedback and ideas, participants from both rural and urban areas who preferred communication message A mostly suggested adding more assertive and persuasive language. They believed the message should discourage smoking in public spaces and encourage passive smokers, particularly women, to confront active smokers. Meanwhile, compared with the idea of adding a fear or mystical element, urban participants tended to prefer specifying women as the target of the communication message, whether children, mothers, or pregnant women. The idea of using media for the communication emerged during the data collection in urban areas. According to the participants, it is important to conduct communications through the right media, such as large events, public service advertisements, and music.

Notably, based on this analysis, communication message option "A" requires further refinement to effectively convey the dangers of SHS exposure for women.

DISCUSSION

Communication message for children

The results of this study indicated that most participants from both rural and urban areas in Indonesia believed that communication messages containing the word "death" could be effective in discouraging smoking inside the home to protect children. These findings highlight the emotional impact of the word "death," which represents the worst possible outcome, aligning with findings from other studies from urban areas in Indonesia. This message was also effective in prompting participants to consider that the victims could be their own family members. Children as

secondhand smoker being exposure a risk factor for various health issues, such as lung cancer, heart disease, and respiratory illnesses. Smoking is considered the primary preventable cause of death worldwide (7). By expressing sadness, their sense of humanity dominates their thoughts, eventually leading to a change in behavior to refrain from smoking inside the home, aligning with the Health Belief Model (HBM). The HBM posits that individuals who understand the vulnerability and severity of unhealthy behaviors will strive to reduce risky behaviors, including smoking, inside the home.

Our study found that active smokers were aware of the health risks associated with smoking, as evidenced by their intention to quit smoking. It is a major risk factor for numerous diseases, impacting not only smokers but also those exposed to second-hand smoke. Its influence goes beyond the respiratory system, affecting various other essential organs (8). However, their convictions were stronger when messages were coupled with statistical data. In our study, many participants preferred message option C, which contained the actual number of child deaths due to cigarette smoke exposure from family members. Participants found numerical data expressed in real numbers easier to comprehend than those in percentages. Psychologically, number perception is part of a broader perception that involves recognizing, organizing, and interpreting information from the environment. It involves complex cognitive processes including attention, memory, and pattern recognition. For example, individuals can quickly recognize the number of objects in a small group without counting them individually, a phenomenon known as subitizing. The human-specific understanding of numerical information is shaped by actions related to fingers, egocentric space, and experiences with magnitude in everyday life (9). Our study participants perceived the reported case incidence as substantial without calculating the prevalence rates or comparing them to the overall population.

This study also provides insight into communication message delivery as tobacco-free education. According to participants from rural Indonesia, effective educational media include audio–visual media, such as videos and films. These media are considered capable of portraying complex messages and evoking emotional responses (10). Some participants suggested incorporating testimonials from families that had experienced the death of a child due to cigarette smoke. For the participants, providing a real-life depiction influenced public emotions and awareness, contributing to overall behavioral change. Emotional and impactful communications, especially those featuring testimonials, have proven effective in promoting smoking cessation in communities (11) (12). Communication messages that openly highlight health issues and emphasize the negative consequences of using testimonial methods have proven to be effective in promoting healthy behaviors. Tobacco control messages in India films also raise concerns about the harmful effects of smoking and the intention to quit smoking (13).

Communication messages should be provided to participants to highlight actual data on child deaths. Therefore, participants can reflexively visualize the death of a child using various symbols to specifically influence the emotional aspects of active smokers, especially their parents. Notably, for maximal effectiveness across the population, we can use communication. By communicating, we not only open up about our concerns and share our feelings, but we also strengthen our connection with that individual. Effective communication serves as a fundamental pillar for ensuring high-quality healthcare, and leading to better health outcomes(14) . The most important aspect to analyze is the media used by smokers. The result of the previous study showed that comics is more successful in helping teenagers who have received anti-smoking education to improve their knowledge and attitude of smoking cessation (15). Social media is an effective platform for reaching diverse audiences and providing knowledge and understanding related to the communication against the impact of cigarette smoke on children, as well as strategies to reduce and prevent exposure (16). However, exposure to cigarette promotions on social media affects young people, especially influencers and celebrities (17). Therefore, tobacco control communications must be conducted on social media. The findings of this study can inform the development of emotionally compelling messages that highlight the dangers of cigarette smoke for children. Several participants also suggested incorporating video testimonies on the impact of cigarette smoking on children.

Communication message for woman

Our findings indicated that participants from both rural and urban areas in Indonesia had similar responses. Both groups agreed that the term “dying” can act as a trigger for avoiding smoking at home. The results suggest that an anti-smoking communication should target both active and passive smokers, encouraging them to speak up when smokers are in inappropriate places, such as crowded areas or indoors. This aligns with Green's theory, which states

that individual behavior change is influenced by three main factors: predisposing, enabling, and reinforcing factors(18). This study reinforces the evidence that effective communication also requires external factors to prevent active smokers from endangering others while smoking. In addition to increasing the knowledge and awareness, policies regarding smoke-free areas (SFAs) must be strictly enforced.

In Indonesia, SFA policies are outlined in health laws, government regulations, and regional regulations. The three districts/cities in East Java do not have policies regulating SFAs. Although Banyuwangi and Surabaya already have SFA regulations, their implementation requires further investigation. The results of this study provide input for the government to be more assertive in implementing SFA regulations, particularly in public places. Furthermore, the government needs to actively socialize with the community. Study in China showed that commitment and dedication from all parts of local governments are essential to implement SFA(19) . SFA regulations effectively protected communities at a higher risk of exposure to SHS smoke in seven facilities, serving as tobacco control efforts (20).

The limitations of the SFA policies necessitate social support from families to restrict indoor smoking activities. Families contribute to improving public health by avoiding cigarette smoke exposure. Passive smokers who confront active smokers do so to protect themselves and safeguard those around them. In Indonesia, women play a significant role in tobacco control, as they are often passive smokers. Family-based interventions, especially those led by wives, are effective in producing changes in the smoking behavior of husbands, encouraging them to quit smoking for up to six months. Previous study showed that men reported their spouse as their source of peer support (21). Housewives strongly support tobacco price increase policies that encourage smokers to reduce and eventually quit smoking (22). Therefore, anti-smoking communications should also target passive smoking.

Based on this research, rural participants suggested visually emphasizing the role of women in addressing tobacco-related issues while maintaining an impression of the impact of cigarette smoke on women, particularly regarding mortality. Such communication messages raise awareness about protecting women and children, ensuring their rights to a healthy life, and eliminating discrimination against them (23).

Urban participants also proposed communication media with songs that are related to urban life and the use of social media, which are familiar to the youth. Songs are considered an effective medium for providing enjoyable learning experiences and increasing enthusiasm for learning (24). In Indonesia, cigarette advertisements on television use music to support them. Therefore, regulating the music industry is necessary to prevent the dissemination of tobacco-related content (25). Music is a prominent medium in digital communities (26), and its influence should inspire anti-tobacco activists to develop compelling health advertisements that include music. Beyond social media, communication messages should be delivered through public announcements and local events attended by many people from various groups.

The limitation of the present study is that participants shared similar backgrounds despite being from different regions. Future research should analyze participants from different backgrounds to assess variations in the acceptance of anti-smoking communication messages as tobacco-free education.

CONCLUSION

This study highlights that active smokers are aware of the harmful effects of SHS, indicating its health impacts and the potential for passive smokers to become active smokers in the future. Our study findings emphasize the importance of emotionally impactful educational messages as tobacco-free education. Communication messages that include words like “death” or mortality figures, particularly related to women as passive smokers, have a strong emotional impact due to the impact of cigarette smoke from statistical evidence. This study also highlights the importance of educating passive smokers, especially women, on message framing in urban and rural areas. Effective media strategies are crucial for delivering educational messages to both active and passive smokers, encouraging them to challenge active smokers. Governments can enforce SFA regulations and maximize their implementation by providing designated smoking areas as stipulated in the regulations. To maximize impact, communication messages should incorporate local terminology and align with cultural context.

AUTHOR’S CONTRIBUTION STATEMENT

All authors had actively participated in all stages of the manuscript preparation. Sri Widati: Conceptualization; Data curation; Formal analysis; Supervision; Writing - original draft; Writing - review & editing;

Validation; Resources. Susy Katikana Sebayang: Conceptualization; Funding acquisition; Investigation. Ira Nurmala: Investigation, Validation. Muthmainah: Formal analysis, Writing - original draft. Kurnia Dwi Artanti:, Investigation, Funding acquisition. Nur Alifia Hera: Project administration; Writing - original draft. Reza Fajrinmuha: Project administration; Software. Janni Leung: Conceptualization; Funding acquisition, Resources. Carmen Lim: Conceptualization; Funding acquisition; Investigation. Caitlin McClure-Thomas: Conceptualization; Funding acquisition; Methodology. Fitri Fausiah: Methodology, Investigation. Ghea Farassania: Data curation, Investigation

CONFLICTS OF INTEREST

All authors declare that There are no conflicts of interest for financial or personal relationships in this manuscript.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

This manuscript does not utilize AI in its preparation because it is qualitative research that requires specific exploration at the research site.

SOURCE OF FUNDING STATEMENTS

The funding source for this research is from The University of Queensland Australia, Airlangga University and Indonesia University.

ACKNOWLEDGMENTS

The authors wish to acknowledge to The University of Queensland Australia, Universitas Airlangga, Airlangga Health Promotion Center, and Indonesia University.

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