



Strategy and Impact of Educational Videos on the Dangers of Smoking on Instagram by the Makassar's Health Department Through Collaboration with Local Influencers

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Abstract. Indonesia faces a persistently high prevalence of smoking, particularly among adolescents, necessitating innovative communication strategies to promote tobacco control. This study aims to analyze the strategy and impact of the Makassar Health Department's collaboration with local influencers in disseminating anti-smoking educational videos on Instagram. Using a qualitative descriptive approach, data were collected through in-depth interviews with program managers at the Makassar Health Department and observation of seven uploaded videos. Engagement Rate (ER) was calculated based on likes, comments, and shares to assess audience interaction. Results indicate that Instagram serves as an effective medium for health behavior change communication, reaching younger demographics through culturally resonant and emotionally engaging content. The collaboration with local influencers enhanced message relatability and expanded audience reach beyond official government channels. The highest ER was achieved by influencer Uyha Yasashaky with 296%, suggesting exceptionally high engagement and viral diffusion. The findings reveal that this partnership exemplifies the two-step flow of communication model, where trusted public figures act as intermediaries between health authorities and the public. Moreover, institutional leadership and resource support from the Makassar Health Department ensured message consistency and alignment with broader public health objectives. In conclusion, the strategic use of local influencers on social media proved to be a highly effective approach for amplifying tobacco control messages, increasing public engagement, and reinforcing healthy behavioral norms within the sociocultural context of Makassar.

Keywords: Educational video, smoking, strategy, instagram, influencer

1. Introduction

Indonesia ranks among the countries with the highest smoking prevalence globally, with approximately 70.2 million smokers aged over 15 years (1). In addition to this alarming prevalence, the country faces a serious public health challenge stemming from the tobacco epidemic, which contributes to an estimated 290,000 tobacco-related deaths annually. Of these deaths, more than 52,000 are attributed to exposure to secondhand smoke, underscoring the widespread impact of tobacco use on non-smokers (2). Among tobacco-attributable diseases, cancer remains the leading cause of mortality, with lung cancer accounting for approximately 34,300 cases, making it one of the most significant contributors to tobacco-related deaths in Indonesia (3).

Beyond mortality figures, the disease burden associated with tobacco use remains a major public health concern in Indonesia. One way to quantify this burden is through the Premature Mortality Cost (PMC), which estimates the economic loss resulting from premature deaths due to specific diseases using the human capital approach (4). A study conducted by

Masrida et al. revealed that the PMC attributable to smoking differs by gender. Among men, the highest PMC was associated with lung cancer (IDR 81,042,604), followed by liver cancer (IDR 34,006,483) and bladder cancer (IDR 7,897,961). Among women, the highest PMC was also linked to lung cancer (IDR 10,477,350), followed by cervical cancer (IDR 4,071,864) and leukemia (IDR 1,483,041). These findings highlight the substantial economic and health impact of tobacco-related diseases in Indonesia, particularly through the premature loss of productive years of life (5).

In response to the high prevalence and mortality rates associated with smoking in Indonesia, particularly among the productive age group and adolescents, there is an urgent need for innovative and adaptive communication strategies. Such approaches must specifically target these vulnerable populations by taking into account the psychosocial and environmental factors that influence smoking behavior (6). In the current digital era, one increasingly relevant approach involves enhancing public awareness of the dangers of smoking through social media platforms, which have become powerful tools for public health promotion. Evidence suggests that social media campaigns can exert a significant influence on smoking-related behaviors, especially among younger audiences (7).

Research by Allem et al. demonstrated that social interactions on media platforms such as Twitter can shape public opinions and behaviors related to tobacco consumption through educational content about e-cigarettes (8). Furthermore, large-scale health campaigns have been proven effective in reducing smoking prevalence when integrated with comprehensive tobacco control policies and strong public support. For instance, Murphy-Hoefer et al. examined the impact of the *"Tips from Former Smokers"* campaign, which successfully influenced smoking cessation behaviors (9), while Nurwidya et al. discussed strategic tobacco reduction policies within the Indonesian context (10). These findings highlight the importance of evaluating public engagement and response levels toward campaign content to enhance overall effectiveness.

As the frontline institution in regional public health governance, local health departments hold a strategic responsibility in designing and implementing programs for education, advocacy, and the enforcement of tobacco control regulations. One emerging approach involves the utilization of social media as a health communication tool (11). Through collaboration with local influencers, health departments can disseminate messages, such as those concerning the dangers of smoking, in a manner that is more relatable and accessible to the general public, particularly younger audiences. This approach is recognized for its potential to expand campaign reach and strengthen message effectiveness (12).

The analysis of public engagement and responses toward health campaign videos has the potential to reveal patterns that can assist in formulating more effective health promotion strategies by the Makassar City Health Office. A deeper understanding of how campaign content is received, interacted with, and shared on social media enables the health authority to design more targeted and adaptive communication strategies, thereby extending the reach of health messages to previously underserved segments of the population.

Collaboration with local influencers who possess strong cultural and emotional proximity to their followers (13) has become an increasingly popular strategy in health promotion campaigns, particularly those addressing the dangers of smoking. These influencers serve not only as messengers of health information but also as agents of behavioral change (14). Through their personal and relatable communication styles, they hold significant potential to influence the perceptions, knowledge, and actions of their audiences regarding

specific health issues (15). In various Indonesian cities, including Makassar, local health departments have begun partnering with influencers to deliver anti-smoking messages through creative and easily digestible content on social media platforms such as Instagram.

Accordingly, this study aims to explore in depth the level of engagement, public responses, and communication strategies employed by the Makassar City Health Office in disseminating educational video content on the dangers of smoking through social media platforms. The primary focus of this research is to analyze the extent to which these videos capture public attention, raise awareness, and encourage attitudinal change regarding the harms of smoking. Furthermore, the study examines the effectiveness of collaboration with local influencers in conveying health messages and evaluates the types of messages and content formats that generate the greatest impact among target audiences. Although numerous studies have examined the use of educational video interventions through social media, limited research has specifically focused on educational videos produced by government health agencies as part of official public health interventions aimed at promoting smoking cessation—particularly those implemented through collaborations with local influencers. The findings are expected to provide strategic recommendations for optimizing digital-based tobacco control campaigns at the regional level and to serve as a reference for developing more innovative and participatory health communication models. This research provides valuable insights for government agencies and tobacco control regulators in formulating more effective strategies to reduce smoking prevalence in the community through the use of social media platforms.

2. Methods

This study employed a qualitative descriptive design to obtain an in-depth understanding of communication strategies, forms of collaboration, and public responses to smoking hazard education content disseminated on Instagram by the Makassar City Health Office in collaboration with local influencers. The research was conducted in Makassar City from August to September 2025, centered at the Makassar City Health Office as the primary institutional site.

Informants were selected using purposive sampling, focusing on individuals directly involved in designing, managing, and evaluating the educational video campaign. The key informants consisted of the Head of the Section for Disease Prevention and Control (Pencegahan dan Pengendalian Penyakit, P2P), as well as staff from the Health Promotion Division responsible for the Smoking Cessation Program (*Usaha Berhenti Merokok*, UBM). The main informants were the managers and administrators of the Instagram account @p2p_dinkesmakassar, which served as the platform for campaign dissemination. This sampling strategy ensured the inclusion of participants with relevant institutional authority and operational experience in tobacco control communication.

Data were collected through semi-structured, in-depth interviews using an interview guide validated through expert review by two public health communication specialists to ensure content relevance and clarity. Triangulation was applied through the integration of qualitative interview findings with quantitative engagement rate (ER) analysis, which measured user interactions (likes, comments, and shares) for each educational video. This triangulated approach strengthened the validity of interpretations by combining perceptual insights with empirical engagement data.

Data analysis followed thematic analysis procedures, including transcription, coding, categorization, and theme formulation based on recurring patterns across informants. The interpretation of communication strategies was further guided by Geoff Mulgan's (2019) innovation framework, which includes five analytical dimensions—purpose, context, direction, action, and learning—providing a structured approach for assessing how strategic communication goals align with execution and audience feedback. The rationale for this framework lies in its comprehensive ability to integrate organizational intent and social response, making it particularly relevant for analyzing health communication innovations within public institutions.

3. Results and Discussion

The research findings are presented in two main sections. The first section elaborates on the results of in-depth interviews conducted with officials from the Makassar City Health Office, focusing on the communication strategies and collaborative approaches used in the implementation of smoking hazard education campaigns. The second section discusses the impact of health education videos by analyzing the Engagement Rate (ER) of each anti-smoking video uploaded to the @p2p_dinkesmakassar Instagram account, which featured collaboration with local Makassar influencers.

3.1. Makassar City Health Office's Strategy in Implementing Educational Videos through Collaboration with Local Influencers

3.1.1. Purpose of Strategy

Based on the interview with the Head of the Disease Prevention and Control Division (P2P) of the Makassar City Health Office, the purpose of using Instagram as an educational medium is to serve as an innovation in delivering health messages that can reach a wider audience, particularly adolescents in Makassar City. As stated by the Head of the P2P Division of the Makassar City Health Office:

"...most of the time, it might be perceived as boring by the public. Therefore, we use digital platforms, in this case Instagram, as one of our efforts to broadly deliver such information to the community."

In addition, the purpose of involving local influencers is to adapt the communication style and everyday language commonly used by Makassar residents, ensuring that the messages are more relevant and effectively reach the target audience. This was explained by the person in charge of the Smoking Cessation Program (Usaha Berhenti Merokok, UBM) of the Makassar City Health Office:

"...it's based on the characteristics of Makassar so that the language used is more relatable and better understood, because our target audience is the people of Makassar, and we want to have a shared understanding through familiar language."

3.1.2. Social Context of Audiences

In this study, the environmental aspect was adapted to reflect the smoking context in Makassar City, which includes children, productive-age adolescents, and adults (particularly fathers). Therefore, the selection of local influencers was made to align with the characteristics of these groups. This was explained as follows:

"...the content creation was also targeted at children and teenagers, and we also had content made by mothers and fathers. So, there's family-oriented content. For instance, mothers who observe

what's happening in their surroundings can relate to it. We always pay attention to the environmental context, and the content is adjusted accordingly."

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3.1.3 Direction

The study found that the direction for producing educational videos on the dangers of smoking and collaborating with local influencers was primarily guided by the leadership, particularly in terms of budget allocation. The content of the educational videos was required to remain closely aligned with the central theme of smoking hazards. Furthermore, it was explained that there were no specific directives regarding the selection of local influencers; rather, the process involved coordination with the leadership to obtain approval for the chosen collaborators, as stated below:

"...there were no specific directives, but everything had to align with the available budget. The materials created had to stay relevant to the theme of smoking hazards."

"...of course, there was coordination with the leadership. The selection was made by our team, but we still coordinated with the leadership once everything was deemed appropriate."

3.1.4 Action

This study found that the process of initiating, executing, and supervising the production of educational videos was systematically implemented. The creation of the smoking hazard educational videos involved collaboration with a third party or vendor, who was responsible for managing production and coordinating with local influencers. However, the Health Office maintained oversight of the vendor's work and reviewed the videos prior to publication to ensure compliance with the intended message and ethical standards. Once the videos were completed, an evaluation process was conducted. The findings regarding these actions were explained as follows:

"...everything was handled by a third party. So, we received the videos once they were ready for broadcast. However, if there were any parts that we felt were excessive, we could request revisions or modifications."

The strategy for determining hashtags, upload schedules, and other posting arrangements was managed directly by the vendor in coordination with the local influencers, as described below:

"...the vendor handled it. They informed us, saying something like, 'we have a timeline, this is the best time to upload.'"

3.1.5 Learning

The learning component identified in this study emerged through the experiences gained during the campaign process, which subsequently informed strategies for future educational video initiatives. The reflections from this phase emphasized the importance of understanding audience behavior and optimizing content timing to maximize engagement. As explained by one of the informants:

"...we also have to consider the target audience we want to reach, like, when are these teenagers most likely to enjoy watching the videos? For example, in the morning or afternoon they're busy studying, so perhaps in the evening is a better time. That's part of the strategy for publishing, these are the kinds of lessons we take forward."

3.2 Impact of Educational Video through Engagement Rate (ER)

The videos analyzed in this study were uploaded by the official Instagram account of the Makassar City Health Office's Disease Prevention and Control Division (P2P), under the username @p2p_dinkesmakassar, featuring educational content on the dangers of smoking in collaboration with local Makassar-based influencers. A total of seven videos were included in the analysis.

The impact of each video was measured using the Engagement Rate (ER), calculated based on the number of *likes*, *comments*, and *shares*. The formula applied was:

$$\text{Engagement Rate (ER)} = \frac{(\text{comments} + \text{likes} + \text{shares})}{\text{followers}} \times 100\%$$

The number of followers was determined using each influencer's follower count, as their significantly larger audience base contributed more substantially to the overall engagement rate.

The detailed information for each uploaded video on the Health Office's Instagram account is presented below. The resulting ER values were then interpreted according to Hootsuite's (2022) benchmark classification for assessing the quality of Instagram engagement levels, which categorizes ER as follows:

Tabel 1. General Standard for Interpreting Social Media Engagement Rate (Based on Follower Count)

Engagement Rate (ER) Category	Percentage	Description
Low	<1%	The audience is relevant but shows minimal interaction due to less engaging content
Moderate	1– 3,5%	The audience begins to engage actively and respond to the content
High	3,5– 6%	The audience is highly active and responsive because the content is engaging and relevant
Very High	> 6%	The content reaches a broader audience beyond the main followers

Table 2. Analysis of Engagement Rate (ER) Levels of Smoke-Free Educational Videos Collaborated with Local Influencers

No	Video Title	Influencer	Likes	Comments	Shares	Follower	Views	ER	Desc.
1	Protect Yourself and Your Family from Cigarette Smoke (<i>Jaga Dirita' dan Jaga Keluarga dari Asap Rokok</i>)	Rahmat Almu Arrif	699	66	40	11.100	13.200	7,25%	Very High
2	A Happy Life Without Smoking (<i>Hidup Bahagia Tanpa Rokok</i>)	Nurul Anisa	1.560	64	144	169.000	41.500	1,04%	Moderate
3	Smoking in Tourist Area (<i>Merokok di Tempat Wisata</i>)	Uyha Yasashaky	71.500	1.191	12.500	28.700	1.600.000	296%	Very High
4	A Harmonious Family without Smoking (<i>Keluarga Harmonis Tanpa Rokok</i>)	Adisurya	774	11	26	87.900	19.800	0,9%	Low
5	Life without Vape (<i>Hidup tanpa Vape</i>)	Iksan Bangsawan	308	32	49	247.000	11.500	0,15%	Low
6	Being Cool Without Cigarettes and Vapes (<i>Keren Tanpa Rokok dan Vape</i>)	Firman Setiadhi	305	24	14	13.100	5.619	2,6%	Moderate
7	Looking Toward a Smoke-Free Future (<i>Menatap Masa Depan Tanpa Rokok</i>)	Abdul Wahab sam Amise	2.157	30	204	184.000	46.800	1,29%	Moderate

The results of the Engagement Rate (ER) analysis presented in Table 2, based on the ER category standards in Table 1, indicate that among all videos uploaded through collaborations with local influencers, two videos achieved a “Very High” ER. These were “*Jaga Dirita' dan Jaga Keluarga dari Asap Rokok*” (Protect Yourself and Your Family from Cigarette Smoke) featuring Rahmat Almu Arrif, with an ER of 7.25%, and “*Merokok di Tempat Wisata*” (Smoking in Tourist Areas) featuring Uyha Yasashaky, which recorded the highest ER at 296%.

Conversely, the video “*Hidup Tanpa Vape*” (Life Without Vaping) by Iksan Bangsawan had the lowest ER of 0.15%, falling below the average engagement level. In terms of audience reach, the highest number of views was also recorded for the video featuring Uyha Yasashaky, with 1,600,000 total views, consistent with its exceptionally high engagement rate.

These findings suggest that the *Merokok di Tempat Wisata* video not only achieved strong audience interaction but also reached viewers beyond the influencer's primary followers, indicating a viral impact and widespread resonance of the campaign message within the community.

3.3 Discussion

The results of the study on the objective variable, as one of the strategic approaches implemented by the Makassar City Health Office, indicate that Instagram was utilized as an innovative medium to reach a broader audience—particularly targeting adolescents and young adults. In 2024, the number of active social media users in Indonesia reached 167 million people, accounting for 64.3% of the total population. Among these users, the 18–34 age group represented the majority (54.1%), with female users (51.3%) slightly outnumbering male users (48.7%). Specifically, Instagram remained one of the most widely used platforms in Indonesia, with 122 million active users, representing 47.3% of the total social media population (17).

In the context of health promotion, social media platforms such as Instagram serve as strategic channels for behavior change communication, given their broad reach, high interactivity, and ability to foster emotional connections with adolescent audiences (18). The involvement or collaboration of influencers in anti-smoking educational videos functions as a medium to expand audience reach while simultaneously acting as role models who encourage behavioral change among smokers to quit smoking.

Behavioral change can occur through observational learning, where individuals model behaviors exhibited by others, supported by reinforcement, self-efficacy, and social influences. In this regard, local influencers can serve as observable role models for children and adolescents, enabling them to internalize and adopt the health messages conveyed—particularly when these influencers are perceived as credible, authentic, and confident communicators (19).

This study is supported by previous research utilizing Instagram as a medium for health education on the dangers of smoking among female students at Diponegoro University, which found that such educational content significantly influenced behavioral dimensions, including knowledge, attitude, and practice (KAP) (20). Further supporting evidence comes from studies involving adolescents that examined the role of social media influencers, often local public figures or celebrities who is in shaping youth health behaviors. These studies highlight mechanisms such as emotional attachment, persuasive messaging, and the ability of influencers to raise awareness and drive behavioral change, thereby reinforcing the effectiveness of using local influencers in video campaigns on smoking prevention (21).

The findings of this study align with established theories and previous research emphasizing the influence of mediated communication and social modeling in shaping health behaviors. According to Bandura's *Social Cognitive Theory*, behavior change occurs through observational learning, reinforcement, and self-efficacy, where individuals tend to imitate credible and relatable role models within their social environment. In this context, the use of local influencers in anti-smoking educational videos supports the behavioral change process, as audiences are more likely to internalize messages delivered by figures perceived as authentic and trustworthy. This is consistent with the principles of *Behavior Change Communication (BCC)*, which highlight the importance of emotionally engaging and culturally resonant messaging to effectively influence public attitudes. The present study strengthens

existing evidence by demonstrating that government-led health campaigns can leverage influencer collaboration on social media platforms such as Instagram to enhance visibility, engagement, and message acceptance. Supporting this, prior research at Diponegoro University revealed that Instagram-based educational interventions significantly improved students' knowledge, attitudes, and practices (KAP) regarding smoking hazards, while studies on adolescents further indicate that social media influencers play a vital role in driving behavioral change through emotional attachment and persuasive communication. Thus, this study contributes to the growing body of literature by showing how collaborative, influencer-based communication strategies can increase the effectiveness and reach of public health campaigns, particularly in promoting smoking cessation among youth.

The selection of local influencers in the anti-smoking educational videos produced by the Makassar City Health Office was strategically aimed at ensuring the messages were easily understood and culturally resonant with the local community. This approach was based on the observation that Makassar audiences are more receptive to messages delivered in their colloquial language and cultural style. This cultural affinity is reflected in the popularity of locally produced films, such as *Uang Panai*, starring local influencers Tumming and Abu, which attracted approximately 600,000 viewers during its theatrical release (22).

However, this study also identified several challenges in the implementation of the campaign, including budget constraints, limited human resources managing social media operations, and time management issues in maintaining consistent online engagement. These findings are consistent with Golestani et al. (2025), who highlighted that institutional challenges in public health initiatives often stem from limited health resources and insufficient service time management (23). Despite these limitations, the Makassar City Health Office has allocated a specific budget dedicated to activities under the Smoking Cessation Initiative (Upaya Berhenti Merokok, UBM) program. Moreover, the high number of views, likes, and shares on the uploaded videos indicates that the content was well-received by the audience. Nonetheless, interview results revealed that the P2P Instagram account managers occasionally received negative feedback through direct messages.

A study conducted by Muhammad Zia et al. (2024) analyzed the influence of public leadership on collaborative administration and the provision of public health services, revealing that effective public leadership significantly enhances interagency collaboration and improves the quality of health service delivery (25). In alignment with these findings, the anti-smoking campaign implemented by the Makassar City Health Office was strongly supported by institutional leadership, which granted flexibility to both the vendor team and local influencers in executing the campaign according to pre-approved guidelines. This leadership support ensured that the campaign's strategies and educational materials remained consistent with broader governmental health policies, particularly those aimed at raising public awareness of tobacco-related health risks and promoting a collective commitment to healthier behavioral norms.

The selection of local influencers in the anti-smoking educational videos produced by the Makassar City Health Office was strategically designed to ensure that the messages conveyed were easily understood and culturally resonant with the local community. This strategy was grounded in the understanding that audiences in Makassar respond more positively to messages delivered in their own colloquial language and cultural context. The effectiveness of this approach is reflected in the success of locally produced media, such as the film *Uang Panai*—starring popular local influencers Tumming and Abu—which drew

approximately 600,000 viewers during its theatrical release (22). Nevertheless, this study also identified several practical challenges in campaign implementation, including budget constraints, limited human resources for social media management, and difficulties in maintaining consistent online engagement. These findings align with Golestani et al. (2025), who emphasized that institutional barriers to public health initiatives often arise from restricted financial resources and inadequate time management for service delivery (23). Despite these constraints, the Makassar City Health Office has allocated a dedicated budget to support activities under the *Smoking Cessation Initiative (Upaya Berhenti Merokok, UBM)* program. Furthermore, the high levels of audience interaction—measured through views, likes, and shares—indicate that the educational videos successfully captured public attention. However, interview data revealed that account administrators occasionally received negative feedback via direct messages, highlighting the challenges of maintaining positive digital engagement in public campaigns. Supporting this, a study by Muhammad Zia et al. (2024) found that effective public leadership significantly enhances inter-agency collaboration and strengthens the quality of public health service delivery (25). Consistent with these findings, the anti-smoking campaign by the Makassar City Health Office benefited from strong institutional leadership, which provided operational flexibility to vendors and influencers while ensuring adherence to pre-approved content and messaging guidelines. Such leadership support reinforced alignment between campaign execution and national health policy goals, particularly in raising awareness of tobacco-related health risks and fostering a collective movement toward healthier behavioral norms.

The strategy employed to reach audiences, particularly adolescents which is proved to be highly effective, as evidenced by the number of views and comments generated across several videos uploaded by local influencers on their respective Instagram accounts in collaboration with the P2P Division of the Makassar City Health Office. Among these, the influencer Uyha Yasashaky achieved the highest engagement rate (ER) of 296%, indicating exceptional audience interaction. The video's performance demonstrated that it successfully reached viewers far beyond the influencer's primary follower base, reflecting both viral dissemination and the strong resonance of the campaign message within the broader community.

The collaboration between the Makassar City Health Office and local influencers represents a form of modeling strategy, in which influencers act as role models for healthy behavior, capable of stimulating observation and imitation among adolescents (24). Moreover, the partnership between influencers and official government accounts, such as that of the Health Office, illustrates the two-step communication flow model, whereby health messages are first transmitted through trusted figures before being received, interpreted, and internalized by the audience (25).

Overall, this study underscores that the use of social media, particularly Instagram that involving local influencers as agents of change is an effective approach to increasing public awareness, especially among adolescents and young adults, regarding the dangers of smoking. The campaign's success was influenced not only by internal factors, such as the careful selection of appropriate influencers and the use of engaging communication styles, but also by external factors, including government policies and social media regulations that support public health campaigns.

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several videos uploaded by local influencers in collaboration with the P2P Division of the Makassar City Health Office. Among these influencers, Uyha Yasashaky achieved the highest engagement rate (ER) of 296%, indicating exceptional audience interaction. This level of engagement suggests that the video successfully reached audiences beyond the influencer's primary follower base, reflecting both viral dissemination and the strong resonance of the campaign's message within the wider community. The collaboration between the Makassar City Health Office and local influencers exemplifies a *modeling strategy*, wherein influencers serve as behavioral role models capable of stimulating observational learning and imitation among adolescents (24). Furthermore, this partnership aligns with the *two-step flow of communication* model, where health messages are initially transmitted through trusted opinion leaders before being received, interpreted, and internalized by the target audience (25). Overall, this study highlights that leveraging social media – particularly Instagram – through collaborations with local influencers as agents of change constitutes an effective approach to enhancing public awareness, especially among adolescents and young adults, regarding the dangers of smoking. The campaign's success was influenced not only by internal factors, such as the strategic selection of relatable influencers and the use of engaging communication styles, but also by external factors, including supportive government policies and social media regulations that facilitate public health communication initiatives.

However, to further enhance the effectiveness of such educational videos, the researchers recommend closer monitoring of audience responses. This could be achieved by fostering more direct engagement through comments or private messages, as well as by evaluating the long-term behavioral impacts of the campaign, particularly in reducing smoking habits among the target population. Future research could be conducted by examining health education videos in terms of their direct impact on followers or the broader community.

Conclusion

This study concludes that the collaborative strategy between the Makassar City Health Office and local influencers has proven to be an effective approach in expanding the reach of anti-smoking educational messages on social media, particularly on Instagram, a platform predominantly used by adolescents. The involvement of local influencers played a crucial role as role models, capable of conveying health messages in a contextually relevant and emotionally engaging manner, utilizing language and communication styles familiar to the local community. This collaboration exemplifies the practical application of the two-step flow of communication theory, wherein public health messages from government institutions are amplified through trusted public figures, enhancing message credibility and acceptance among younger audiences.

The high Engagement Rate (ER) achieved by several videos, most notably the post by influencer Uyha Yasashaky, which reached 296%, demonstrates the effectiveness of this strategy in generating active audience engagement and extending message reach beyond the influencers' direct followers. Such a high ER serves as a clear indicator of message success in capturing attention, fostering interaction, and reinforcing the educational narrative on the dangers of smoking. Therefore, this strategic collaboration between health institutions and local influencers not only enhances the visibility of public health campaigns, but also strengthens the internalization of healthy behavioral values within the cultural and social context of Makassar society.

Conflicts of Interest

The authors declare no conflict of interest.

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