

Social Marketing Research: The impact of anti-smoking social advertising on knowledge levels via Instagram Stories.

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Abstract

Cigarettes are a risk factor accounting for the high mortality rate of passive smokers in the world. Instagram is one way to disseminate information about the dangers of cigarettes. This research aims to determine the effectiveness of social marketing through Instagram stories in disseminating anti-smoking campaign ads and increasing knowledge about the dangers for

smoking amongst new students in the faculty of Public Health, University of Mulawarman. This research was conducted from October 8-10th 2022, using quantitative methods through Instagram polls. Social marketing in the form of anti-smoking campaigns through Instagram stories was used to measure knowledge levels. However, more research is needed to develop health promotion strategies on social media. Additional studies are required to create social media health promotion approaches. Key words: social marketing; instagram story; health promotion.

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Introduction

Cigarettes are a risk factor accounting for the high mortality rate of passive smokers in the world. Cigarettes contain 4,000 harmful chemical compounds. According to health experts, out of all the dangers of cigarette smoke, only 25% threaten active smokers. As many as 75% of the dangers of cigarette smoke threaten people who are exposed to other people's cigarette smoke (passive smokers) (Kemenkes RI, 2018). Based on the Ministry of Health's Basic Health Research in 2013, the passive smoking population in Indonesia reached 96.9 million people. It consists of 30.2 million men and 66.7 million women (Kemenkes RI, 2019).

The anti-smoking campaign is designed to provide information on the dangerous effects of smoking and cigarette smoke on the health of smokers and those around them. This anti-smoking campaign was disseminated through social media. Most people are looking for information through social media (Mukti and Putri, 2021) (Appel, Grewal, Hadi, & Stephen, 2020; L. Li et al., 2020; Voramontri & Klieb,

2019). In the business world, social media has been used to introduce and promote products to a wide audience. Social media can also be used as a means of interacting with customers online (Dafa and Hariyanti, 2021)(Olivia, 2021; Zhafira, Purba, Asteriani, & Soesilo, 2022).

Instagram is one of the most popular social media platforms in the world, especially among young adults (Statista, 2021). The application can help its users disseminate or exchange information, images, and videos in digital form. One of the existing Instagram features is Instagram Story. This feature is a medium for sharing photos, videos, and messages that disappear within 24 hours, but which are automatically saved in Archive Stories and can be re-displayed on Instagram profiles through Story Highlights (B. Li, Scott, Naraine, & Ruihley, 2021; Vinerean, 2019)(Adelina, Barus and Santosa, 2018).

In 2018, Instagram grew significantly around the world, and it is still a global phenomenon (kemp, 2019). Indonesia is one of the countries with the highest number of Instagram users in the world. The number of Instagram users by July 2021 was 91.77 million. The largest percentage of users (36.4%) is 18 – 24 years old. Instagram ranks third as the most used social media platform, after YouTube and WhatsApp. Instagram is becoming a very popular social media app in different parts of the world because it allows its users to share photographic content as well as to follow the lives of their favorite artists (Statista, 2021). Instagram was chosen for carrying out this campaign because its target audience is young people, especially college students who, on average, use Instagram. Thus, Instagram can facilitate the dissemination of information designed to increase knowledge about the dangers of cigarettes.

Research method

The social marketing campaign was conducted between October 8th and 10th, 2022 through @promkesfkmunmul20 Instagram account. This research used a quantitative method, consisting of Instagram polls based on content provided during a 24-hour period on Instagram stories.

Stages of research:

1. Observation

Observation was carried out to determine the needs of the target, as well as the language and style of the content. The observation was carried out through an online questionnaire in the form of a google form with questions related to the target audience's knowledge about and attitudes towards cigarettes. Observations were carried out on 33 followers of @promkesfkmunmul Instagram account with aged 17-20.

2. Designing a marketing strategy

Designing this social marketing strategy uses the 1C4P method (Lee & Kotler, 2019; Storey, Hess, & Saffitz, 2015). The 1C4P method consists of Customers (targets), Products, Places, Prices, and Promotions. The target of this product is students of the Faculty of Public Health at Mulawarman University, active followers of Instagram @promkesfkmunmul20, and the Instagram account's reach. The total reach of the Instagram account used is 3.221 accounts. The product marketed is an anti-smoking social campaign carried out through Instagram stories on the Instagram account @promkesfkmunmul20, with a followers count of about 152 people. The account was promoted through several personal Instagram accounts owned by targets of this campaign. The targets invested time, internet quota, and cellphone battery to participate in the campaign.

3. Product implementation

The dissemination of content through Instagram stories was carried out for 2 days with consistent hours, on the October 8th and 9th, 2022 at 19:10 pm. The information content on the first day contained information about the definition of cigarettes, factors affecting smokers, and active smokers. Meanwhile, the second day's information content contained information about passive smokers, the content of cigarettes, and how to avoid smoking behavior. The period of dissemination through Instagram stories is 24 hours.

4. Data collection and analysis

Data collection was carried out on October 9th and 10th, 2022, after the dissemination on Instagram stories was completed, by taking data from Instagram polls about previously submitted information. The data collected was analyzed to determine the usefulness of the content in terms of increasing the targets' knowledge level.

Results and discussion

Results

1. Characteristics of Respondents

Table 1 shows that the biggest age group following the Instagram account @promkesfkmunmul20 is that aged 18-24, with as many as 112 people (74%). The smallest age groups were 13-17 years and 35-44 years, with 6 people (4%). Meanwhile, most followers of @promkesfkmunmul20 are female, with 131 people (86%) with only 21 males following the account (14%)

Table 1. Characteristics of Respondents

No	Characteristics	Frequency	Percentage (%)
1	Age (Year)		
	13-17	6	4
	18-24	112	74
	25- 34	17	11
	35-44	6	4
2	Sex		
	Female	131	86
	Male	21	14

Source: Primary Data (2022)

2. Interactions from Instagram stories

Table 2. Interactions from Instagram stories

Day	Content	View		Reach		Like	
		Frequency	Average	Frequency	Average	Frequency	Average
1	Types of Cigarettes	151	148	154	150	11	11
	Factors of Smoking Behavior	148		148		11	
	Definition of Active Smoker	146		148		11	
	Total	445		450		33	
2	Effort to Avoid Smoking Behavior	130	131	126	129	8	8
	Definition of Passive Smoker	132		131		8	
	Content of Cigarettes	132		130		8	
	Total	394		387		24	

Source: Primary Data (2022)

Table 3. Instagram poll evaluation results

Day	Question	Number of correct answers (%)	Number of incorrect answers (%)	Total (%)
1	Below are the types of cigarettes, except...	37 (43,53%)	48 (56,47%)	85 (100%)
	One of the factors that drive smoking behavior...	75 (87,21%)	11 (12,79%)	86 (100%)
	A person who smokes is directly referred to as...	86 (98,85%)	1 (1,15%)	87 (100%)
	Average of answers	66 (76,74%)	20 (23,26%)	86 (100%)
2	Efforts to avoid smoking behavior, except...	60 (96,77%)	2 (3,23%)	62 (100%)
	A person who is exposed to someone else's cigarette smoke is referred to as...	33 (57,89%)	24 (42,11%)	57 (100%)
	Which is not the content of cigarettes...	43 (69,35%)	19 (30,65%)	62 (100%)
	Average of answers	45 (75,12%)	15 (24,88%)	60 (100%)

Source: Primary Data (2022)

Table 2 shows that the total number of views obtained on the first day of content broadcast was 445, with an average of 148. On that day, the information content uploaded via an Instagram story by @promkesfkmunmul20 contained types of cigarettes, factors that influence smoking behavior, and definitions of active smokers. Each content had a different number of views. The content with the highest number of views was about the types of cigarettes (151 viewers), and the content with the least number of views was about the definition of active smokers. The total reach obtained on the first day of content broadcast was 450 accounts, with an average of 148 accounts. On that day, the content with the highest reach was about types of cigarettes. Furthermore, the total number of likes obtained on the first day of content broadcast was 33, with an average of 11 likes. Of the three uploaded contents, the number of likes obtained for each content was the same, namely 11 likes.

Table 2 shows that the total number of views obtained on the second day of content broadcast was 394, with an average of 131. On that day, the information content uploaded via @promkesfkmunmul20's Instagram story contained efforts to avoid smoking behavior, the definition of passive smoking, and the content of cigarettes. Each content had a different number of views. The content with the most views was about the definition of passive smoking (132 viewers) and about the content of cigarettes (132 viewers), and the content with the least views was about efforts to avoid smoking behavior. The reach obtained on the second day of content broadcast was 387 accounts, with an average of 129 accounts. On that day, the content with the greatest reach was about the definition of passive smoking. The total number of likes obtained on the second day of content broadcast was 24, with an average of 8. The number of likes each of the three uploaded contents got was the same, namely 8 likes.

3. Instagram poll evaluation results

Table 3 shows that the average distribution of respondents who answered the three questions given during the evaluation of information content on the first day through the Instagram poll was 86, with an average of 66 (76.74%) who answered correctly. The average of respondents who answered incorrectly was 20 (23.26%). The question with the highest number of correct answers (86 (98.85%)) was "A person who smokes is directly referred to as...". The question with the highest number of wrong answers (48 (56.47%)) was "Below are the types of cigarettes, except...". Of the three questions given during the evaluation of content on the second day through Instagram polls, the average distribution of respondents who answered the questions was 60 respondents, with an average of 45 (75.12%) respondents who answered correctly, and an average of 15 (24.88%) who answered incorrectly. The question with the highest number of correct answers (60 (96.77%)) was "Efforts to avoid smoking behavior, except...". The question with the highest number of wrong answers (24 (42.11%)) was "A person who is exposed to someone else's cigarette smoke is referred to as...".

Discussion

The biggest social media users are young adults (Anderson & Jiang, 2018; Boulianne & Theocharis, 2020; Alhabash and Ma, 2017). The posts on Instagram they like are inspirational quotes, colors, gifts, funny memes, selfies, and photos of friends and family (Leaver, Highfield, & Abidin, 2020; Ross, 2019)(Thomas et al., 2020). Instagram is a social media that is quite popular among Indonesians, especially millennials aged 18-24 years. Based on the results from the analysis of the characteristics of @promkesunmul20's followers, promotion using social media Instagram stories can also reach people aged 13-54 years. Thus, the content to be uploaded must be more adapted for all ages, both visually and in the language used, so that the content is more eye-catching and information can be conveyed easily. Content must use images and videos that are creative, entertaining, not boring, as well as language that is easy to understand and adjusted to the target age (Karundeng, 2020; Krisnanto, 2019).

In addition to being cheap and fast,

Instagram has unlimited reach and has many features that support marketing activities (Mou, 2020; Ferica and Parlindungan, 2020). The reach of Instagram accounts @promkesfkmunmuk20 is around 3,221 accounts, most of which are females aged 18-24 years. This means that providing health information through Instagram can be said to be effective because it can reach many audiences, especially teenagers and young adults. In addition, social marketing through Instagram can also be done at a low cost.

The results showed that the most popular anti-smoking campaign content on the first day was about types of cigarettes. This can be seen from the number of views, reach, and likes on uploaded content, which is more than the content on smoking behavior factors, and the definition of an active smoker. The most popular Anti-Smoking campaign content on the second day was about the definition of passive smoking. This can be seen from the number of views, reach, and likes on uploaded content, which is more than content on efforts to avoid smoking behavior, and the content in cigarettes.

The results of this research show that more views on an Instagram story can be interpreted as anti-smoking campaign ads being increasingly widespread and more respondents being able to answer questions related to evaluating information content through Instagram polls correctly. The time to upload content on Instagram stories must also be considered. The duration of content uploaded in a row can have an impact on reducing the number of views and reach on Instagram stories. This can result in low numbers of targets receiving health information through Instagram stories. Stories and posts will get more attention and interaction from Instagram users if they are uploaded at peak times, namely 9 am, 12 pm, and 6 pm (Husna et al., 2021; Olivia, 2021; Zhafira et al., 2022).

Instagram can help students obtain the health information they need (Anisah, Sartika and Kurniawan, 2021). Based on the anti-smoking campaign content obtained, it was found that providing health information in social campaigns through Instagram stories is useful for increasing the target's level of knowledge. This is in line with the intent of creating an anti-smoking campaign through Instagram stories, which is to disseminate information and to increase knowledge about the

dangers of cigarettes. However, respondents still experience difficulties in answering questions, especially questions related to the types of cigarettes and the definition of passive smoking. This can be explained by a decrease in the memory of the target answering the question (Anggraeni et al., 2023).

A factor that can support the success of social marketing through Instagram is to use hashtags on every post. Hashtags can expand the market network because those who can see accounts are not only followers, but also a wider market, resulting in a wider reach (Sriyanto and Fatimah, 2021). In addition, in creating content, attention must be paid to the target's needs, how they react to different content, and what they complain about. All these are valuable resources for developing a social network communication strategy (Klepek & Starzyczná, 2018).

The downside of social marketing through Instagram is that content can only be shared in the form of images. Instagram is an image-based online life-sharing app, allowing only for quick interactions (Kang, Chen and Kang, 2019). Another disadvantage of social marketing through Instagram Stories is that not all users can "like" the content that has been uploaded because it is a new feature on Instagram and not all users can use the feature. The time for uploading content – 24 hours - is also limited, because after 24 hours the content will disappear and move to the account archive.

Conclusion and suggestions

The results of this research found that social marketing with Instagram is quite effective in disseminating anti-smoking campaign advertisements, considering that 3,221 accounts were reached. Based on this research, social marketing about the anti-smoking campaign carried out through the Instagram Story feature can be used to increase knowledge about the dangers of smoking for new students of the Faculty of Public Health, Mulawarman University. However, further research is still needed to develop health promotion strategies on social media. In addition, it is hoped that future researchers will create health information content that is more interesting and easily understood by people from all walks of life.

References

- Adelina, R., Barus, B. and Santosa, H. P. (2018) 'Hubungan Intensitas Melihat Instagram Story dan Intensitas Komunikasi Antar Pengguna dengan Perilaku Mengunggah Instagram Story', *Interaksi Online*, 6(4), pp. 103–123.
- Alhabash, S. and Ma, M. (2017) 'A Tale of Four Platforms : Motivations and Uses of Facebook , Twitter , Instagram , and Snapchat Among College Students ?', *Journal sagepub*, 3(1). doi: 10.1177/2056305117691544.
- Anisah, N., Sartika, M. and Kurniawan, H. (2021) 'Penggunaan Media Sosial Instagram dalam Meningkatkan Literasi Kesehatan Pada Mahasiswa', *Jurnal Peurawi: Media Kajian Komunikasi Islam*, 4(2), p. 94. doi: 10.22373/jp.v4i2.11080.
- Dafa, P. M. and Hariyanti, P. (2021) 'Efektivitas Penggunaan Instagram Stories Pada Akun @ male . id Terhadap Pembentukan Brand Awareness dan Minat Beli di Kalangan Mahasiswa Universitas Islam Indonesia The Effectiveness Of Using Instagram Stories On @ male . id ' s Account For The Formation', *Jurnal Cantrik Komunikasi*, 1(1), pp. 41–54.
- Ferica, S. and Parlindungan, D. R. (2020) 'Pemanfaatan Media Sosial Instagram Sebagai Strategi Komunikasi Pemasaran Pada Online Shop @ diet _ inget _ irwan', *KALBISOCIO Jurnal Bisnis dan Komunikasi*, 7(2), pp. 53–58. Available at: <http://ojs.kalbis.ac.id/index.php/kalbisocio/article/view/149>.
- Husna, H. N. et al. (2021) 'Penggunaan Instagram Stories sebagai Media Promosi Kesehatan Mata', *JPP IPTEK (Jurnal Pengabdian dan Penerapan IPTEK)*, 5(2), p. 61. doi: 10.31284/j.jpp-iptek.2021.v5i2.1891.
- Kang, X., Chen, W. and Kang, J. (2019) 'Art in the age of social media: Interaction behavior analysis of instagram art accounts', *Informatics*, 6(4), pp. 1–19. doi: 10.3390/informatics6040052.
- Kemenkes RI (2018) *Situasi Umum Konsumsi Tembakau di Indonesia (Current Tobacco Consumption in Indonesia)*, Databoks. Available at: http://www.depkes.go.id/resources/download/pusdatin/infodatin/infodatin_tembakau_per_halaman.pdf.
- Kemenkes RI (2019) *96 Juta Orang Indonesia Jadi Perokok Pasif*, Databoks. Available at: <https://databoks.katadata.co.id/datapublish/2019/07/04/96-juta-orang-indonesia-jadi-perokok-pasif>.
- kemp, simon (2019) *Digital 2019: Essential Insights Into How People Around The World Use The Internet*,

- Mobile Devices, Social Media, and E-Commerce, We Are Social & Hootsuite. Available at: <https://datareportal.com/reports/digital-2019-global-digital-overview>.
- Krisnanto, I. W. F. (2019) 'Strategi Pemasaran Politik Pada Era Digital: Pemanfaatan Instagram Dalam Kampanye Politik Pada Pilgub Dki Jakarta 2017', *Journal of Politic and Government Studies*, 8(3), pp. 1–14.
- Mukti, O. F. W. and Putri, N. K. (2021) 'Social Media Analytics: Instagram Utilization for Delivering Health Education Messages to Young Adult in Indonesia', *Jurnal PROMKES*, 9(1), p. 36. doi: 10.20473/jpk.v9.i1.2021.36-43.
- Sriyanto, Y. P. and Fatimah, D. N. (2021) 'Pemanfaatan Instagram Sebagai Media Bisnis Online Akun @ Gwetnic . Id Melalui Bauran Pemasaran', *Massive: Jurnal Ilmu Komunikasi*, 1(1), pp. 54–66.
- Statista (2021) Inilah Negara Pengguna Instagram Terbanyak, Indonesia Urutan Berapa?, Databoks. Available at: <https://databoks.katadata.co.id/datapublish/2021/08/03/inilah-negara-pengguna-instagram-terbanyak-indonesia-urutan-berapa>.
- Thomas, V. L. et al. (2020) 'Instagram as a tool for study engagement and community building among adolescents: A social media pilot study', *Digital Health*, 6, pp. 1–13. doi: 10.1177/2055207620904548.
- Anderson, M., & Jiang, J. (2018). Teens, social media & technology 2018. *Pew Research Center*, 31(2018), 1673–1689.
- Anggraeni, J., Nurrachmawati, A., & Nur, R. (2023). *Pengaruh Media Tiktok Terhadap Tingkat Pengetahuan Tentang Bahaya Napza Pada Remaja di SMK Negeri 1 Samarinda*. 8(1), 26–38.
- Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The Future of Social Media in Marketing. *Journal of the Academy of Marketing Science*, 48(1), 79–95.
- Boulianne, S., & Theocharis, Y. (2018). *Young People, Digital Media, and Engagement: A Meta-Analysis of Research*. 38(2), 111–127.
- Karundeng, F. (2020). *Developing Instagram Filter-Based Accounting Educational Game as a Fun Learning Media*. 2(2), 113–130.
- Klepek, M., & Starzyczna, H. (2018). Marketing communication model for social networks. *Journal of Business Economics and Management*, 19(3), 500–520. <https://doi.org/10.3846/jbem.2018.6582>
- Leaver, T., Highfield, T., & Crystal, A. (2020). *Instagram: Visual social media cultures*. John Wiley & Sons.
- Lee, N. R., & Kotler, P. (2019). *Social marketing: Behavior change for social good*. Sage Publications.
- Li, B., Scott, O. K., Naraine, M. L., & Ruihley, B. (2021). Tell me a story: Exploring elite female athletes' self-presentation via an analysis of Instagram Stories. *Journal of Interactive Advertising*, 21(2), 108–120.
- Li, L., Zhang, Q., Wang, X., Zhang, J., Wang, T., Gao, T.-L., Duan, W., Tsoi, K. K., & Wang, F.-Y. (2020). Characterizing the Propagation of Situational Information in Social Media During Covid-19 Epidemic: A Case Study on Weibo. *IEEE Transactions on Computational Social Systems*, 7(2), 556–562.
- Mou, J. B. (2020). Study on social media marketing campaign strategy--TikTok and Instagram. *Massachusetts Institute of Technology*.
- Olivia, G. (2021). Analysis of Consumer Purchase Behavior of Non-Authorized (Non BPOM) Face Mask In Indonesia Local Product. *Advanced International Journal of Business, Entrepreneurship and SMEs*, 3(9), 67–90.
- Ross, S. (2019). Being real on fake Instagram: Likes, images, and media ideologies of value. *Journal of Linguistic Anthropology*, 29(3), 359–374.
- Storey, J. D., Hess, R., & Saffitz, G. (2015). *Social marketing*.
- Vinerean, S. (2019). *Social media marketing efforts of luxury brands on Instagram*.
- Voramontri, D., & Klieb, L. (2019). Impact of social media on consumer behaviour. *Int. J. Inf. Decis. Sci*, 11(3), 209–233.
- Zhafira, A. K., Purba, C. A. F., Asteriani, D., & Soesilo, P. K. (2022). The Effect of Social Media Influencer's Perceived Sincerity and Perceived Similarity on Consumers' Attitude and Purchase Intention. *Journal of Research in Business, Economics, and Education*, 4(1), 22–32.

