



## Can Dentists Use Social Media Marketing Effectively While Adhering to Ethical Guidelines?

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### ABSTRACT

Instagram is a photo and video-based social media platform that dentists can use to present their brands to potential patients through digital marketing. Before uploading content to social media, dentists must consider several factors, such as visual marketing communication as well as legal and ethical considerations. The purpose of the study is to use the AISAS marketing communication model, advertising ethics, and dentist professional ethics to analyze the content of dental health service advertising on Instagram. This research uses the quantitative methodology and a descriptive content analysis method. 100 samples of dental health service advertising on Instagram from 2017 to 2021 were found through the hashtag #doktergigijogja. The sampling technique used is convenience sampling. The sample was assessed by two coders using a checklist. The research data are presented in descriptive statistics. The maximum number of AIA indications that can be fulfilled is 13 out of 15 indicators. There are 64 advertisements (coder 1) and 77 advertisements (coder 2) that violate at least one article in The Regulation of the Minister of Health No.1787/2010. There are 31 advertisements (coder 1) and 29 advertisements (coder 2) that violate the articles in The Indonesian Dental Code of Ethics 2020. An educational approach by paying attention to the effectiveness of marketing communications while also honoring the dental profession's ethics is a strategy that can be used before posting dental health service advertisements on Instagram.

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### Kata kunci:

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### ABSTRAK

Instagram adalah salah satu jenis media sosial berbasis gambar dan video yang dapat dimanfaatkan oleh dokter gigi sebagai media pemasaran digital untuk mengenalkan merek di benak calon pasien. Dokter gigi harus memperhatikan beragam aspek sebelum mengunggah konten di media sosial, yaitu tercapainya komunikasi pemasaran secara visual juga dengan memperhatikan isu legal dan etik. Tujuan dari penelitian ini adalah untuk menganalisis isi iklan pelayanan kesehatan gigi di Instagram menggunakan model komunikasi pemasaran AISAS, etika iklan dan etika profesi dokter gigi. Penelitian ini menggunakan metode analisis isi deskriptif dengan pendekatan kuantitatif. 100 sampel iklan pelayanan kesehatan gigi di Instagram dari tahun 2017-2021 ditemukan melalui hashtag #doktergigijoga. Teknik sampling yang digunakan adalah convenience sampling. Sampel dinilai oleh dua coder menggunakan daftar periksa. Data hasil penelitian disajikan secara statistik deskriptif. Jumlah indikator AIA terbanyak yang dapat dipenuhi adalah 13 dari 15 indikator. Jumlah iklan melanggar minimal satu pasal pada PMK No.1787/2010 adalah 64 iklan (coder1) dan 77 iklan (coder 2). Jumlah iklan melanggar pasal pada KODEKGI 2020 adalah 31 iklan (coder 1) dan 29 iklan (coder 2). Strategi yang dapat dilakukan dalam mengunggah iklan pelayanan kesehatan gigi

di Instagram adalah menggunakan pendekatan edukasi dengan memperhatikan efektivitas komunikasi pemasaran dan tetap menghormati etika profesi kedokteran gigi.



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## INTRODUCTION

The ease of internet access and the development of the digital world resulted in many major changes to human life including a change in the doctor-patient relationship, from the relationship between healers and the sick to the interaction between service providers and service users. Patients have the right to decide their preferred dentist and dental treatment. Patients' expectations and needs are raised when they have easy access to information about the latest dental and oral care (Douglass & Sheets, 2000; Harbisetar dkk., 2019).

Dentists, particularly in the private sector, have begun to pay attention to innovative marketing and promotion strategies in order to increase patient visits as a response of the demands to adapt and the increasing number of new dentists (*e-Sertifikasi PDGI*, 2020). The correct promotion has a big impact on how patients choose dental services based on their needs and desires (Susanto & Astuti, 2013). One of the innovations and strategies used by dentists to get attention and appreciation is digital marketing through social media (Mahapatra dkk., 2019).

Social media is being used as a new kind of marketing since it has a lot of clout and offers benefits that traditional marketing couldn't provide, such as interactive communication with one-on-one interactions with clients, broad reach, low cost, and speed. This allows for better, more targeted interactions and a bigger number of consumers to be reached (Snyman & Visser, 2014; Talpau, 2014). Instagram is a photo and video-based social media platform that dentists can use to introduce their brands to prospective patients through digital marketing (Park & Namkung, 2022; Stec, 2020). It was discovered that content in the form of uploaded supporting pictures and narratives elicited a good response from the intended audience, such as quickly catching attention, and might be used to improve visual communication between dentists and patients (Alalawi dkk., 2019). Instagram's growing popularity has been discovered to have a significant impact on purchasing decisions (Park & Namkung, 2022).

Before posting content on social media, dentists should consider several factors. One of them is for dentists to create visual marketing communication to prospective patients, that will lead to the main goal of acquiring prospective patients' trust and visits to the dentist (Mahapatra dkk., 2019). The promotion's contents or messages influence the patient's mindset when assessing something, forming a certain attitude (Susanto & Astuti, 2013). In this era of information disruption, customers have a tendency to filter information and only pay attention to what they are interested in (Sugiyama & Andree, 2011). The effectiveness of marketing communications can be assessed using the AISAS model as a model of consumer behavior patterns (Sugiyama & Andree, 2011). The AISAS model stands for Attention, Interest, Search, Action, and Share, and is a development of the previous model, AIDMA (Attention, Interest, Desire, Memory, Action), which was developed by the Japanese

company The Dentsu Way to describe the flow of customer behaviour in the internet and digital transformation era (Sugiyama & Andree, 2011).

The second factor to consider is legal and ethical issues, such as if the advertisement's content is factual and responsible, and whether it is not degrading to religion, culture, country, or community groups (De Lira & Magalhães, 2018; Douglass & Sheets, 2000; Mahapatra dkk., 2019). The Indonesian Dental Code of Ethics 2020 and the Regulation of the Minister of Health of the Republic of Indonesia Number 1787 of 2010 about Advertising and Publication of Health Services regulate the ethics of health service advertising.

Digital marketing content in dentistry is like having two blades, depending on how a dentist uses it. Advertising has a positive impact as an educational tool to raise public knowledge of dental health. On the other hand, content that misleads the public owing to a misinterpretation of the facts shown, has a negative impact (Dable dkk., 2011; Smaldone dkk., 2020). As a result of this issue, the question arises: how can dental health service advertisements fulfill marketing communications goals while still adhering to professional ethics? The goal of this study is to analyze the content of dental health service advertisements posted on Instagram by dentists and dental clinics as a digital marketing communication medium.

## METHOD

The descriptive content analysis method is used in this study. Descriptive content analysis is used to thoroughly describe the content of written or printed messages and information in the media. The sample is an Instagram advertisement for dental health services that was found by searching for the hashtag (#) *#doktergigijogja*, which generated 28,800 posts. The inclusion criteria were that the advertisement for dental health services was uploaded from the Instagram account of a dentist or dental clinic in Yogyakarta, was in the form of photos with a caption, and was uploaded around 2017 and 2021. The sampling technique used is convenience sampling, which involves scrolling and stopping randomly on the Instagram hashtag searching page, the content is then selected as a sample if it matches the specified sample criteria.

One hundred dental service advertisements were assessed by two coders using a checklist. The checklist consists of three indicators, namely the AIA (Attention, Interest, Action) indicator from the AISAS model The Dentsu Way to assess advertising based on the effectiveness of marketing communications, indicators based the Regulation of the Minister of Health of the Republic of Indonesia Number 1787 of 2010 about Advertising and Publication of Health Services and indicators based on The Indonesian Dental Code of Ethics 2020 to analyze violations of advertising ethics. The research data are presented in

descriptive statistics using percentages in the form of tables and graphics

## RESULTS AND DISCUSSION

### *Indicator based on AIA (Attention, Interest, Action) from AISAS model*

The findings of the Cronbach's Alpha analysis test were > 0.754 on 200 checklist assessments. When the result is

greater than 0.7, all instruments and data collection techniques are declared valid and reliable, or that meet the requirements and agreements reached amongst coders (Setyonugroho dkk., 2015).

The results showed that there were no advertisements that fulfilled all of the AIA indicators (15 indicators). The highest number of AIA indicators that can be fulfilled are 13 indicators, with number of samples is 5 (coder1) and 1 (coder 2). The minimum number of AIA indicators that can be fulfilled according to coder1 is 5 indicators by 2 samples and according to coder2 is 4 indicators by 7 samples.

**Table 1.**  
**AIA Indicator Percentage**

Variable	Indicator	Coder 1		Coder 2	
		Σ	%	Σ	%
Attention	Highlight the main information / headlines with intriguing language (fonts in the main information are made with a larger size / with different font types / different font colors)	58	5,77%	46	5,19%
	Use slogans.	41	4,08%	40	4,51%
	Each ad features a brand logo (logo name / logo mark).	93	9,25%	90	10,16%
	Has an attractive design (in terms of color selection, typeface use, and the presence of photographs / photos)	94	9,35%	79	8,92%
Interest	Making consumers interested by using language with polite and logical words.	97	9,65%	93	10,50%
	Deliver messages in detail but concise and easy to understand.	90	8,96%	77	8,69%
	Deliver messages in an informative and communicative way.	94	9,35%	77	8,69%
	Explain the advertised product/service with descriptive sentences.	83	8,26%	61	6,88%
	Explain the upsides and downsides of products/services using actual examples and proper words	89	8,86%	61	6,88%
	There are pictures of the dental clinic's location, dental clinic facilities, and the dentist's work results.	77	7,66%	83	9,37%
	Displays a telephone number.	19	1,89%	14	1,58%
	Tagging activity (tag friends in the comments section)	21	2,09%	15	1,69%
Action	There are comments in the comments section.	84	8,36%	85	9,59%
	Using persuasive words	56	5,57%	56	6,32%
	Displaying special offers or discounts.	9	0,90%	9	1,02%

Table 1 shows the indicators with the highest percentages are "Making consumers interested by using language with polite and logical words" in Interest variable (coder1: 9,65 % (97 samples); coder2, : 10,50% (93 samples)) and indicators with the lowest percentages are "Displaying

special offers or discounts" in Action variable (coder 1 : 0,90% (9 samples); coder2 : 1,02% (9 samples)).

### *Indicator based on The Regulation of the Minister of Health of the Republic of Indonesia Number 1787 of 2010 about Advertising and Publication of Health Services*

**Table 2.**  
**Advertisements conformity to The Regulation of the Minister of Health No.1787/2010**

Category	Coder 1	Coder 2
Compliance	36	33
Not Compliance	64	77
<b>Total Sample</b>	<b>100</b>	<b>100</b>

There are violations of 12 articles from 14 articles as a result of data coding by coder 1, and violations of 11 articles from 14 articles as a result of data coding by coder 2. There are similar results between coder 1 and coder2 at the highest percentage level of article violations in The Regulation of the Minister of Health No.1787/2010, namely Article 51 which

reads "Health service advertising and/or publication do not disclose information to the public in a way that promotes people to use health services at the health service facility", as many as 26,67% ; 32 samples (coder1) and 30,12% ; 50 samples (coder 2).

**Table 3.**  
Percentage of violations of article on The Regulation of the Minister of Health No.1787/2010

Articles	Coder 1		Coder 2	
	Σ	%	Σ	%
Article 4 (1)	11	9,17%	39	23,49
Article 5a	0	0	6	3,61%
Article 5c	3	2,50%	3	1,81%
Article 5d	2	1,67%	0	0
Article 5e	28	23,33%	25	15,06%
Article 5f	0	0	3	1,81%
Article 5l	32	26,67%	50	30,12%
Article 5m	11	9,17%	6	3,61%
Article 5n	3	2,50%	4	2,41%
Article 5o	18	15,00%	18	10,84%
Article 8 (1)	8	6,67%	7	4,22%
Article 10	4	3,33%	0	0

**Indicator based on The Indonesian Dental Code of Ethics 2020**

**Table 4.**  
Advertisements comformity to The Indonesian Dental Code of Ethics 2020

Category	Coder 1	Coder 2
Compliance	36	33
Not Compliance	64	77
<b>Total Sample</b>	<b>100</b>	<b>100</b>

**Table 5.**  
Percentage of violations of article on The Indonesian Dental Code of Ethics 2020

Article explanation points	Coder 1		Coder 2	
	Σ	%	Σ	%
1. Dentists are prohibited from doing promotions in the form of self-praise, prohibited from advertising dental equipment and materials, prohibited from making promise, with the intention that patients come for treatment to them.	21	43,75%	18	38,78%
2. Dentists are prohibited from using superlative remarks, indicating the word 'one and only,' or implying excellence, originality, or complexity, or guaranteeing the success of treatment, both verbally and in writing, because they are likely to be misleading.	19	39,58%	23	46,94%
3. Dentists are prohibited from advertising or being a model for advertisements for drugs, medical devices, medical supplies, and health service facilities except in public service advertisements.	8	16,67%	7	14,29%

Table 5 shows the difference between the results of coder1 and coder2 on the Indicator based on The Indonesian Dental Code of Ethics 2020 that the highest percentage of violations of coder1 is point 1 by 43.75%; 21 samples and coder 2 is point 2 by 46.94%; 23 samples.

**Advertisement in Instagram as a way of marketing communication for dental health care facilities.**

Images and videos as the main features of Instagram are media for delivering appropriate communication for dental health service advertisements, in addition to introducing locations and dental health service facilities as well as dental health education media to prospective patients. The majority of dentists' work is visual or can be seen by the eye, allowing it to be recorded or captured in a photo or video, which is subsequently posted on social media to influence potential customers' purchasing decisions (Hou dkk., 2021; Park & Namkung, 2022).

The AISAS model is a model that describes the pattern of active consumer behavior from the beginning to the end of the process. This model can also assist companies in

strategizing how to win the hearts of customers at every step in the process (Sugiyama & Andree, 2011). Focused dimension of the attention variable is customers see and pay attention to the dental health care advertisements that are promoted. Attention variable is used to assess the potential of advertisements to catch customer's attention on first impressions. The result of the attention indicator assessment with the highest percentage is that each ad contains a brand logo (logo name / logo mark) (coder1: 93 samples; coder2: 90 samples). A logo mark is an image or symbol that represents a company that is used to communicate brand identity and attract consumer attention (Kim & Lim, 2019). The average result shows that 91 out of 100 samples of dental health service advertisements already display the logo of their brand. Consumers would be able to quickly identify dental health service advertisements from certain brands without having to look up the account name. The average outcome of 61 out of 100 ads samples already has a visually appealing design, as evidenced by the image, appropriate typography or font choices, and color combination selection. Purchasing decisions will be influenced by attractive design (Ahmed, 2020). The sample fails to meet this indicator

for a variety of reasons, including a lack of clarity in the photo's resolution, sharpness, and colour, or the absence of explanatory text. The next indicator is still related to typographic design, with research findings that an average of 52 out of 100 ads samples emphasize important information (titles) with engaging words and font designs. A different font, a larger size, or a different color can be used for the headline's main font design. 'Eye-catching' headlines have a better chance to capture the attention of the target audience and encouraging them to engage more with the advertisements (Chae & Kim, 2021). The fourth indicator of the attention variable is using a slogan, that is fulfilled by an average of 40 from 100 ads (coder1: 41 samples; coder2: 40 samples). Slogans are short phrases that explain how a brand stands out from the competitors. Slogans are used to instantly grab the attention of customers and increase product recall in consumers' minds (Alnajjar & Toivonen, 2021).

Interest variable has a focus on the assessment dimension, namely that consumers are interested in promoted dental health services. The interest variable has nine assessment indicators, with five of them focusing on writing for advertising, commonly known as copy writing. The findings of the assessment of five indicators show that 1) "making consumers interested by using language with polite and logical words" as many as an average of 95 samples (coder1: 97 samples; coder2: 93 samples), 2) "deliver messages in an informative and communicative way" as many as an average of 85 samples (coder1: 94 samples; coder2: 77 samples), 3) "deliver messages in detail but concise and easy to understand" as many as an average of 83 samples (coder1: 90 samples; coder2: 77 samples), 4) "explain the advertised product/service with descriptive sentences" as many as an average of 72 samples (coder1: 83 samples; coder 2: 61 samples), dan 5) "explain the upsides and downsides of products/services using actual examples and proper words" as many as an average of 72 samples (coder 1: 83 samples; coder 2: 61 samples). More than 60% of

the sample met the five indicators, indicating that the ad caption met the criteria for good copywriting, in which the choice of the right words is critical in complementing the visual ads in building a strong relationship between the brand and consumers and in influencing purchasing decisions(Chan dkk., 2020; Jailani dkk., 2020). There are photos of the dental clinic's location or photos of the dentist's work in an average of 80 samples (coder1: 77 samples; coder2: 83 samples). Both sorts of pictures provide evidence and visual appeal, which can encourage a "prospective patient" make a purchase decision (Jimura & Lee, 2020). The next two indicators show consumer interest in advertisements for dental health services, notably 1) there are comments in the comments section as many as an average 84 samples (coder 1: 84 samples; coder2: 85 samples) dan 2) tagging activity (tag friends in the comments section) as many as an average 18 samples (coder1: 21 samples; coder2: 15 samples). The last indicator on the interest variable serves to facilitate consumer interest by displaying contact numbers that can be contacted as many as an average of 16 samples (coder 1: 19 samples; coder 2: 14 samples).

The assessment dimension of the Action variable is focused on customers visiting dental health services. The Action variable is made up of two indicators that attempt to improve purchasing decisions and actions. The results of the assessment of the Action indicator with the highest percentage is "using persuasive words" as many as an average 56 samples (coder1: 56 samples; coder2: 56 samples). The second indicator of the Action variable is "displaying special offers or discounts" as many as an average 9 samples (coder1: 9 samples; coder 2: 9 samples). Among the 15 AIA indicators, this one has the lowest percentage. The small percentage of the indicator is influenced by the fact that the indicator "displays a special price", which is in contradiction of the dentistry profession's ethical guidelines.

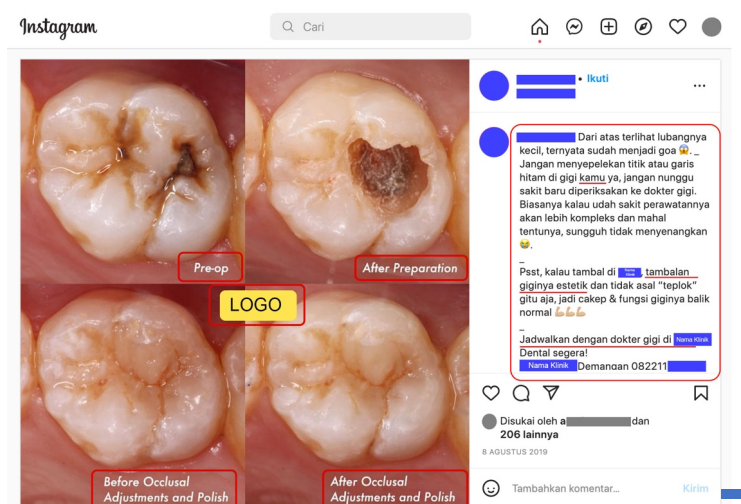


Figure 1. Sample fulfilled the 13 AIA Indicators.

### Marketing Communications for Dental Health Services Advertising and Ethical Issues.

The author selects one advertising, No. 44 (Figure 1), that fulfills the 13 AIA indicators accepted by the two coders, and contrasts the findings of the evaluation using The Regulation

of the Minister of Health No.1787/2010 and The Indonesian Dental Code of Ethics 2020. The results of The Regulation of the Minister of Health No.1787/2010 violations were found to be 2-3 points (coder1: 2 points; coder 2: 3 points) and The Indonesian Dental Code of Ethics 2020 violations were 0-2 points (coder1: 2 points; coder2: 0 points). The Regulation of

the Minister of Health No.1787/2010 violation discovered was in the caption, where there was a phrase that read: "Psst, if the dental filling is done at \*\*\* (name of the clinic), the filling is aesthetic and doesn't just "stick" like that, so it's pretty & the function of the teeth is back to normal". This sentence contradicts three points in the article: 1) the information provided in the advertisement caption implies that the dental clinic provides dental health services that are not available at other dental health care facilities, and 2) the information provided implies comparing the quality of health services provided at other dental health care facilities. and 3) the provided information is self-praising and carries the connotation of excellence and sophistication. The infringement is then mentioned in the sentence "Make an appointment with \*\*\*\* Dental (clinic name) right away!", which contradicts one of the article's points, namely that the information presented is meant to encourage ads readers to get dental treatment at that dental health service facility. Violations in The Indonesian Dental Code of Ethics 2020 are also found in the same sentence "Psst, if the dental filling is done at \*\*\* (name of the clinic), the filling is aesthetic and doesn't just "stick" like that, so it's pretty & the function of the teeth is back to normal", this sentence violates 2 points of The Indonesian Dental Code of Ethics 2020 which are 1) self-promotion through self-praise and making promise and 2) advertising with caption that means excellence. Sentences that contradict The Regulation of the Minister of Health No.1787/2010 and The Indonesian Dental Code of Ethics 2020 also fulfill the AIA indicators on the interest Variable, such as explaining services in descriptive sentences and explaining the benefits of services in the right words, and

also on the Action variable, such as using persuasive sentences.

The next samples studied were advertisement No. 50 (Figure 2) with the results of the research that the AIA indicator assessment is quite high, namely 11-12 points by coder1 and coder2, and there are no violations of either The Regulation of the Minister of Health No.1787/2010 or The Indonesian Dental Code Of Ethics 2020. The advertisement photo is attractively designed, the photo resolution is clear, there is a logo mark, and the photo has a description/headline. Advertisement captions aim to educate the audience by using polite words, explaining the sorts and benefits of products/services in depth, and using descriptive and easy-to-understand words. The caption is not considered unethical because it does not glorify oneself, does not compare one clinic to another, and there is no specificity in mentioning the name of the dental clinic that accompanies the product/service so that it does not imply that the product/service should be used at the dental clinic. As indicated by there's comments and tagging activity in the comments section, advertisements are engaging to the audience. Interest variables that cannot be fulfil is "do not displays a telephone number". This is tolerable since on Instagram, brand identity such as addresses and phone numbers are shown in the Instagram profile bio. "Displaying special offers or discounts" on the Action variable is also not fulfilled. This indicator is quite contrary to The Regulation of the Minister of Health No. 1787/2010 article 5m so it can be excluded. The action variable has been fulfilled by the presence of persuasive sentences in advertisements.

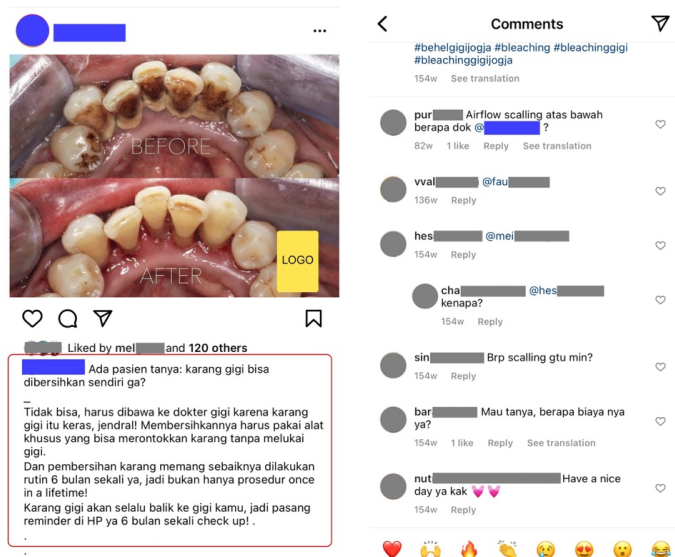


Figure 2. Advertisement No. 50

The next sample is advertisement No. 29 (Figure 3) with the results of coder1 and coder2 assessing a small score of AIA indicator (5 indicators) and finding violations of The Regulation of the Minister of Health No.1787/2010 that were quite large in the amount of 3-4 points (coder1: 3 poin; coder 2: 4 poin) dan violations of The Indonesian Dental Code Of Ethics 2020 totaling 2-3 points (coder1: 2 poin; coder2 : 3 poin). The photo does not have a headline, the photo resolution is poor, the message conveyed is difficult to understand because it does not precisely define a product/service, and it does not include a persuasive

sentence, according to the AIA indicators. Captions that do not contain educational, not informative, not evidence-based, not based on accurate data or facts, and not responsible were determined to be in violation of the Minister of Health's Regulation No.1787/2010 and the Indonesian Dental Code Of Ethics 2020. "Like \*\*\* (name of the clinic), whose care is already provided on a world wide scale. So go straight to \*\*\* (name of clinic) for superb dental care!", this phrase conveys exaggerated self-praise, implying excellence, pushing the utilization of dental clinic services, and making promises. Besides a violation from the caption,

the figure of a health professional is displayed as an advertising model in this advertisement, which violates The

Regulation of the Minister of Health No. 1787/2010 and The Indonesian Dental Code of Ethics 2020.

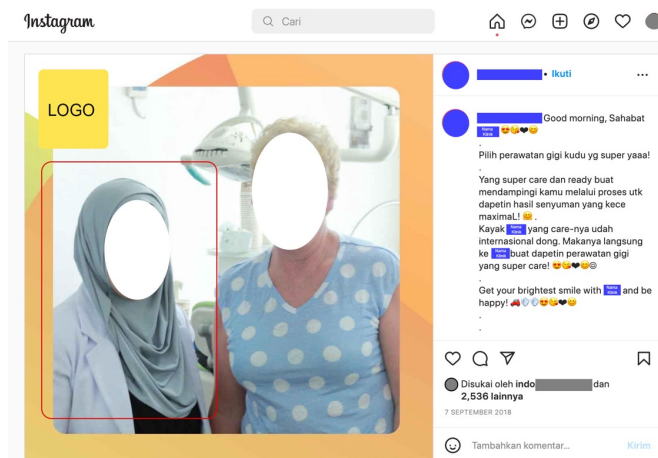


Figure 3. Advertisement No. 29

Marketing strategy is essential for dental clinics in order to attract and retain clients (patients), including ensuring that marketing communication approaches are conveyed to consumers' minds. Health professional must follow ethical norms (De Lira & Magalhães, 2018). Regulations for health-care advertisement have been established in The Regulation of the Minister of Health Number 1787 of 2010 about Advertising and Publication of Health Services and The Indonesian Dental Code of Ethics 2020. Essentially, the Indonesian Advertising Code of Ethics regulates the ethics of advertising in all areas other than the health sector, The Regulation of the Minister of Health No.1787/is also included in the Indonesian Advertising Code of Ethics.

According to Minister of Health Regulation No.1787/2010, health care facilities may conduct advertisements or publications in the media as long as they follow the advertising ethics in the code of ethics and legislation. The words used must not provide incorrect information, praise one self, brag, or provide information that encourages the use of services at their health care facility. It is also prohibited to attack, criticize, or compare the quality of care to other health-care facilities. Prices or discounts must not be displayed in advertisements, nor should health professionals or academic degrees be shown, nor should treatment methods that have not been scientifically tested be advertised. In article 3, the Indonesian Dental Code of Ethics 2020 regulates dentists' ethical behavior in relation to advertising, stating that dentists in Indonesia are not authorized to pursue personal benefit in carrying out their profession.

To reach the two indicators, namely the achievement of marketing communication while remaining ethical, the marketing strategy that can be used is an educational approach, which includes providing information and advice on dental and oral health as well as introducing the services provided by the dental clinic in a neutral manner without mentioning the specifics of the clinic's name in the caption. When the image or photo content utilized is genuine and engaging content from the dental clinic, such as photos of dentist's work or photos of oral health care facilities, it is more appreciated and enhances patient trust (Parmar dkk., 2018). Visual communication and storytelling on Instagram can elicit a favorable emotional response from prospective patients, strengthening the emotional bond between them

and the dental clinic (Lim & Childs, 2020). The advertising method with an educational approach is expected to raise awareness of the need for dental health services and encourage prospective patients to visit the dental clinic (Al Mugeiren & Al Sanea, 2018).

The regulation of advertising ethics in dentistry is obviously well-intended, but this will be a challenge for dentists when facing a rapidly growing digital world (Dable dkk., 2011). So, is it possible that regulation on advertising ethics might be reassessed in order to assist the dentist profession in an increasingly competitive industry?

#### LIMITATION OF THE STUDY

This research still has certain limitations. This study can only assess three of the five AISAS indicators that can be initiated by brands, because this research concentrates on the visual display of advertisements. Further studies on the effectiveness of marketing communications and ethics of dental health service advertisements are needed to explore more deeply from brand accounts and the real impact of advertising on consumer engagement and from the perspective of policy makers.

#### CONCLUSIONS AND SUGGESTIONS

Marketing through social media is a form of adaptation of the dentist profession to the massive development of the digital world. Dental health service advertisements can bring great benefits to both dentists and the public and vice versa. An educational approach by paying attention to the effectiveness of marketing communications while also honoring the dental profession's ethics is a strategy that can be used before posting dental health service advertisements on Instagram.

#### ETHICAL CONSIDERATIONS

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The authors did not receive support from any organization for the submitted work.

## Conflict of Interest Statement

There are no possible conflicts of interest with respect to the authoring and publishing of this work, according to the authors.

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