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# Instagram Social Media as an Effort to Increase Dental Health Knowledge



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**ABSTRACT:** Background: The high prevalence of dental and oral disease is greatly influenced by several factors, one of which is the behavior of people who are not aware of the importance of maintaining oral and dental health, this is based on a lack of knowledge of the importance of maintaining dental and oral health. Efforts to increase knowledge, namely through online media. The choice of Instagram social media is due to the high number of Instagram users in Indonesia and the tendency of Indonesian people to prefer seeing pictures rather than writing. Purpose: This study aims to analyze the effectiveness of dental and oral health knowledge before and after being given education through Instagram social media. Method: The design of this research is quasi-experimental, conducted on 37 respondents obtained by using total sampling technique. The instruments used in this study were Instagram media and questionnaires in the form of a Google form regarding dental and oral health maintenance. Analysis of the data used is a paired sample test. Results: Knowledge before and after being given education about maintaining dental and oral health through Instagram social media results in the good category (59.5%) to (86.5%), in the sufficient category (37.8%) to (13.5%), and in the less category (2.7%) to no (0%) respondents with less knowledge before and after dental health education with Instagram social media is effective in increasing dental and oral health knowledge.

**KEYWORDS:** Instagram, Dental Health Education, Knowledge

### I. INTRODUCTION

Dental and oral health is a part of body health that cannot be separated from one another because it will affect overall body health. Dental and oral disease is a community disease that can affect all age groups, from children to adults. According to the results of Basic Health Research (Riskesdas) in 2018, dental health problems in Indonesia accounted for 45.3% of the population experiencing tooth decay. In the 25-34 year age group, 44.9% experienced tooth decay/cavities/soreness, 12.1% experienced tooth loss, and 94.9% of this age group had never gone to a dental medical professional [1–3].

The high prevalence of dental and oral diseases is strongly influenced by several factors, one of which is the behavior factor of people who are not yet aware of the importance of maintaining dental and oral health. This is based on a lack of knowledge about the importance of maintaining oral health. Therefore, dental and oral health knowledge needs to be taught to the community so that they can change behavior and understand the importance of maintaining healthy teeth and mouth [4,5].

Efforts to maintain dental and oral health are any activities and/or a series of activities carried out in an integrated, integrated and sustainable manner to maintain and improve the dental and oral health status of the community in the form of improving health, preventing disease, treating disease and restoring health by the government and/or Public. Dental and oral health education is an effort to maintain and increase awareness of dental and oral health. Health education is part of health promotion as a prevention effort and provides an understanding of ways to maintain dental and oral health [6–8].

In this era of advances in information and communication technology, the use of information and communication technology must be carried out effectively and efficiently so that it can become an enable technology that encourages innovation in various aspects of the information search process. One of the uses of ICT that is of interest to the wider community is having a social media account. The Ministry of Communication and Informatics (Kemenkominfo) revealed that there are currently 63 million internet users in Indonesia. Of these figures, 95% use the internet to access social media [9,10].

Social media is a medium on the internet that allows users to represent themselves and interact, work together, share, communicate with other users to form social bonds virtually. It is undeniable that social media has a big influence in one's life. In

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social media there is no space and time limit, they can communicate whenever and wherever they are. Social media has a big influence on a person's life, and the presence of the internet is increasingly needed in everyday life, both in outreach activities, educational activities, business activities and so on [11].

Social media is growing rapidly in today's society, one of the most accessed social media, namely Instagram. Instagram is an image-based social media that provides online photo or video sharing services that can be accessed on Android, iOS, Windows Phone and computers. Based on Cuponation research (2019) the average user accesses Instagram every day for 6 hours 35 minutes. Indonesia occupies the fourth position with the most Instagram users in the world, namely as many as 61 million users and the largest percentage of Instagram users in Indonesia, one of which is in the age group 25- 34 years. The choice of Instagram social media is due to the high number of Instagram users in Indonesia and the tendency of Indonesian people to prefer viewing pictures rather than writing [12].

This was proven in a study by Dyah et al who stated that the results of providing dental health education on Instagram were an increase in the knowledge of respondents, before being given education the average knowledge of respondents was 67.94% after being given education the average increased to 91.02 %. Ease of access and attractive appearance on Instagram make Instagram considered very effective in promoting dental and oral health to obtain Oral Health Information (dental health information), increase creativity and as a forum for interaction, learning and sharing of dentistry cases in the form of photos/posters and videos that have been reviewed from the dissemination of broad community messages [13,14].

## II. METHOD AND MATERIAL

The research design used is quasi-experimental research. The research was conducted from April 26 to May 9 2022 at the Karang Taruna Cipedak, Jagakarsa, South Jakarta. The sample in this study amounted to 37 people with a total sampling technique. Data collection was carried out after the researchers obtained permission from the head of the Karang Taruna Cipedak Village. The data collection process was carried out via WhatsApp by sharing the Google form link through the chairman of the Cipedak village youth organization. Beginning with giving a questionnaire before being given education via Instagram social media, then providing education about maintaining dental health through Instagram social media for 5 days, then giving a questionnaire after being given education through Instagram social media. Analysis of the data used is a paired sample test.

### **III. RESULT AND DISCUSION**

Table 1. Frequency	y distribution of Knowled	lge before and after	education with Inst	agram social media
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Variable	n	%	
Knowledge before ed	ucation with Instagram s	ocial media	
Good	22	59.5	
Sufficient	14	37.8	
Less	1	2.7	
Total	37	100	
Knowledge before ed	ucation with Instagram s	ocial media	
Good	32	86.5	
Sufficient	5	13.5	
Less	0	0	
Total	37	100	

Table 1 shows that prior to conducting dental and oral health education through Instagram social media, the results obtained were 22 respondents had good knowledge criteria (59.5%), 14 respondents had sufficient knowledge criteria (37.8%), and 1 respondent had less knowledge criteria (2.7%) whereas after dental and oral health education through Instagram social media the results were 32 respondents had good knowledge criteria (86.5%), 5 respondents had sufficient knowledge criteria (13.5%), and there were no respondents with less of knowledge criteria.

### Table 2. Different test of dental and oral health knowledge before and after education using social media Instagram

Knowledge	Mean	p-value	
Pre-test	79.05	0.000	0.000
Pos-test	87.57	0.000	

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Table 4 shows that the results of the paired sample test analysis obtained a p-value of 0.000, meaning that education using Instagram social media is effective in increasing dental and oral health knowledge

## **IV. DISCUSION**

The results of the study before being given education showed that the highest level of knowledge of the respondents was in the good criteria of 22 respondents (59.5%). Some of the factors that influence the knowledge of respondents include age and gender. The age of the respondents in this study was in the age group of 25-34 years, the more mature the level of maturity and strength a person will be, the more mature they think and work, this is as a result of experience which is a way to obtain a truth of knowledge. The gender in this study was dominated by women, when compared to male respondents with female gender tended to have better knowledge. This is because female respondents have more time to read or discuss with their environment [15,16].

Even though the criteria for respondents' knowledge are in the average good category, it is still important to carry out education to add to and improve respondents' knowledge about dental and oral health maintenance. Health education about maintaining dental and oral health is carried out using media that can attract the attention of respondents, so that knowledge will be easy to remember. This is in accordance with the theory which explains that knowledge is the result of knowing, and this occurs after people sense through the five human senses, namely the senses of sight, hearing, smell, taste and touch [17].

Providing education to this age group using print media is considered less successful, due to the fact that currently people prefer to use social media because internet facilities on mobile phones make it easier to access information. Instagram provides space for its users to share and interact and provides space for its users to display and shape what they want to convey to their audience through photos and videos assisted by captions that they write and comments [13].

Data collection in this study began on April 26 2022 by providing a questionnaire before education was carried out in the form of a Google form link sent via the youth organization's WhatsApp, and respondents were directed to follow Instagram social media accounts created by researchers. On the next day, April 27 to May 1 2022, education will be provided on Instagram social media with material, namely understanding and efforts to maintain dental and oral health in a nutshell, time to brush teeth and procedures for maintaining tools and materials for brushing teeth, brushing techniques correct teeth, foods that need to be increased and reduced in consumption for dental health, as well as the right time for dental examinations, these materials were conveyed to the respondents consecutively for 5 days. After education was carried out on Instagram social media, the researcher gave another questionnaire which was sent via WhatsApp to the youth group chairman in the form of a Google form link.

The results of the paired sample test, knowledge after being given education through Instagram social media shows that the average knowledge in research before being given education on Instagram social media is 79.05 to 87.57 with a p-value of 0.000. This means that there is an increase in knowledge from research results due to the ability of the respondents to develop, both insight and intellectual. Intellectual development is the process of changing the individual's ability to think.

When compared with the results of research conducted by Dyah et al regarding Instagram as an educational medium to increase dental and oral health knowledge. In this study, it was found that there was an increase in knowledge after counseling was carried out on Instagram online media, because the knowledge gained by the respondents increased, and the final results of the two studies were in the good category. This shows the role of online media counseling in increasing respondents' knowledge [13].

# V. CONCLUSION

Based on the results of the study, it can be concluded that dental health education with Instagram social media is effective in increasing dental and oral health knowledge.

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### **CONFLICT OF INTEREST**

The author declared that don't have conflict of interest

### REFERENCES

1) Pudentiana RR, Purnama T, Tauchid SN, Prihatiningsih N. Knowledge of Oral and Dental Health Impacts the Oral Hygiene Index Simplified (OHI-S) of Primary School Children. Indian J Forensic Med Toxicol 2021;15:2179–83.

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- 2) Al-Ansari AA. Prevalence, severity, and secular trends of dental caries among various Saudi populations: a literature review. Saudi J Med Med Sci 2014;2:142.
- 3) RI K. Hasil utama riskesdas 2018. Jakarta Kemenkes RI 2018.
- 4) Widiyastuti R, Purnama T, Laut DM. The effectiveness of the application of the mentoring module on brushing teeth by parents on the behavior of brushing teeth in early childhood. J Drug Deliv Ther 2022;12:83–6.
- 5) Ngatemi, Lestari SY, Purnama T. Pillow Book Media as Dental Health Promotion in Preschool Children: is it effective? Int J Drug Res Dent Sci 2022;4:7–13.
- 6) Notoatmodjo. Promosi Kesehatan dan Perilaku Kesehatan, Edisi Revisi. Jakarta: Rineka Cipta; 2012.
- 7) Puspitawati Y, Ulliana U, Sulistiani S, Fadliyah NK, Nurwanti W. Dental Health Promotion Using Fliphchart Media on Knowledge of Elementary School Student. JDHT J Dent Hyg Ther 2022;3:21–5.
- 8) Ngatemi, Purnama T, Rahmadhani NM. Dental Health Education with Zoom Meeting Application During the COVID-19 Pandemic: Is it Effective? Int J Multidiscip Res Anal 2021;3:5.
- 9) Mayasari Y. Gambaran Umum Pemanfaatan Media Sosial Pada Dokter Gigi: Studi Pendahuluan. M-Dental Educ Res J 2021;1:57–69.
- 10) Fauzi R. Perubahan Budaya Komunikasi Pada Pengguna WhatsApp Di Era Media Baru. J Ilmu Komun Efek 2017;1:265273.
- 11) Nasrullah MS, Rulli D. Riset khalayak digital: Perspektif khalayak media dan realitas virtual di media sosial. Bandung Institute of Technology; 2018.
- 12) Vebriana E, Nur IM, Fauzi F. Perancangan Strategi Media Sosial oleh Tutorial 4 Serangkai Melalui Pemanfaatan Instagram. Pros. Semin. Nas. Unimus, vol. 4, 2021.
- 13) Dyah RS, Elina L. Instagram Sebagai Media Edukasi Peningkatan Pengetahuan Kesehatan Gigi Dan Mulut. J Kesehat Gigi (Dental Heal Journal) 2021;8:90–5.
- 14) Putri Y. Efektivitas Penyuluhan Dengan Media Sosial Dalam Meningkatkan Promosi Kesehatan Gigi Dan Mulut 2020.
- 15) Simamora RH. Pengaruh Penyuluhan Identifikasi Pasien dengan Menggunakan Media Audiovisual terhadap Pengetahuan Pasien Rawat Inap. J Keperawatan Silampari 2019;3:342–51.
- 16) Wulandari A, Rahman F, Pujianti N, Sari AR, Laily N, Anggraini L, et al. Hubungan Karakteristik Individu dengan Pengetahuan tentang Pencegahan Coronavirus Disease 2019 pada Masyarakat di Kalimantan Selatan. J Kesehat Masy Indones 2020;15:42–6.
- 17) Hamzah B. Pengaruh Penyuluhan Kesehatan dengan Media Sosial terhadap Tingkat Pengetahuan Siswa tentang Kesehatan Reproduksi. Pros. Semin. Nas. Stikes Syedza Saintika, vol. 1, 2021.



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