

Analysis of the animated video "Healthy body, strong growth" in growing Post-COVID-19 Obesity Risk Awareness

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Abstract

This study aimed to analyze the making of the animated video "Healthy Body, Grow Strong" in building awareness of the risks of post-covid-19 obesity. The research method used was descriptive qualitative research method and looking for the necessary data by means of literature studies. The results of the research conducted obtained that the animated video PSA "Healthy Body, Grow Strong" itself was produced with the aim of building awareness about the risk of obesity after COVID-19 and urging to prevent it by living a healthy lifestyle..

Abstrak

Penelitian ini bertujuan untuk menganalisis pembuatan video animasi "Tubuh Sehat, Tumbuh Kuat" dalam membangun kesadaran risiko obesitas pasca covid-19. Metode penelitian yang digunakan adalah metode penelitian kualitatif deskriptif dan mencari data-data yang diperlukan dengan cara studi literatur. Hasil dari penelitian yang dilakukan ini diperoleh bahwa Video animasi ILM "Tubuh Sehat, Tumbuh Kuat" sendiri diproduksi dengan tujuan untuk membangun kesadaran mengenai risiko obesitas pasca COVID-19 serta menghimbau untuk mencegahnya dengan menjalani pola hidup yang sehat.

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1. INTRODUCTION

Shifts and adjustments to conditions in the COVID-19 pandemic have had a significant impact on aspects of life and have given rise to new lifestyles that must be lived by every human being. Without exception, young and old people experience similar conditions in adjusting their diet and limiting their activities to stay at home. Especially for children who should have much more physical activity at a young age, but this activity is hampered due to the COVID-19 pandemic. As a result of a shift in lifestyle from active to inactive or sedentary coupled with unhealthy eating patterns, it turns out that the risk of obesity increases more quickly.

The World Health Organization (WHO) states that from 1975 to 2021, the increase in obesity in the world has tripled. Apart from that, most people in the world live in countries that have high obesity rates, which in fact obesity is directly proportional to a high death rate compared to people who are underweight. In 2016, WHO recorded that around 340 million children aged 5-19 years were obese and overweight (World Health Organization, 2021).

According to data from the United Nations International Children's Emergency Fund (UNICEF) in COVID-19 and Children in Indonesia: An agenda for action to address socio-economic challenges, two million children in Indonesia are obese or overweight. This data shows a nutritional crisis that could occur after the COVID-19 pandemic (United Nations International Children's Emergency Fund, 2020).

Obesity and overweight are defined as abnormal or excessive accumulation of fat that can pose various risks to health. To measure obesity in children aged 5-19 years, WHO issued the WHO Growth Reference Median (World Health Organization, 2021).

The prediction of increasing obesity in children has also been researched by the World Obesity Federation organization in COVID-19 and Obesity: The 2021 Atlas. Data obtained by the World Obesity Federation states that there is a predicted increase in obesity in children in Indonesia aged 5-19 years by 6.8% from 2010, namely from 3.9% to 2025, namely 10.7% (World Obesity Federation, 2021).

Table 1
Target Prediction of Prevalence and Number of Obesity Cases in Indonesia in 2010-2022

	2010 %	2025 %	2025 cases (thousands)
Man	3.2%	10.0%	9,457.8
Woman	6.9%	14.8%	14,149.1
Children 5-19	3.9%	10.7%	7,313.2

Source: World Obesity Federation

Obesity not only puts children at risk of various health problems such as diabetes, cancer, heart disease and various other cardiovascular diseases (Ardella, 2020, p. 293). But obesity can also increase mortality so that children's life expectancy decreases (Hanifan, 2016).

Seeing the current situation, information delivery media are needed that can convey messages about obesity in children. This research aims to see how big the implications of making animated videos and promoting the film "Healthy Body, Grow Strong" are in building awareness about the risks of post-covid-19 obesity. The video creation was made in collaboration with the EndCorona organization (a health organization founded by a group of University of Indonesia medical students under the supervision of doctors from the Faculty of Medicine, University of Indonesia) to produce Public Service Advertisements (PSAs) as a means of conveying information to the public.

2. RESEARCH METHOD

This research used descriptive qualitative methods. According to (Creswell, 2014, p. 26-28) qualitative research is a research method that uses an approach to explore and understand the implications that individuals and groups have on social and global issues. The paradigm that used by researcher was the constructivism paradigm. The aim of the constructivism paradigm is to rely on informants' perceptions about the research to be analyzed (Creswell, 2014).

The data used by researcher was secondary data. Secondary data collection techniques were carried out through literature studies by searching for relevant information in books, journals, articles, news and websites. The data analysis method desired by the author in this research was carried out qualitatively, meaning that a very comprehensive in-depth analysis was carried out on the library data that had been collected.

3. RESEARCH RESULTS AND DISCUSSION

Animated videos were an effective way to provide education to children. Several research results show that animated videos can increase children's imagination with moving and colorful images (Utami, Yasmin, Srihartantri, Ramadhania, Safitri, Amalia, Ambarwati, Nikmah, & Iswari, 2021). To get an animated ILM video that attracts children's interest, the animation must be planned and created using a storyboard. Journal articles that implement 2D animation in ILM use the Multimedia Development Life Cycle (MDLC) method developed by Luther to create a multimedia work starting from pre-production, production, to post-production. From this method, there are 6 stages that must be carried out to achieve this process, including concept,

design, material collecting, assembly, testing, and distribution. The video results created by journal article researcher were launched via the YouTube channel (Suryani, Saputra, & Sutrisman, 2019). Next, the ILM was made using 2D animation which discussed fighting the COVID-19 pandemic also using the Multimedia Development Life Cycle (MDLC) method. ILM itself functions as informing, persuading, reminding, and adding value. The data method taken using the accidental questionnaire technique obtained results from 65 respondents that there was a significant relationship between the public service advertising variable and the audience attitude variable (Ulum, Supriyati, & Listyorini, 2021). making PSAs using 2D animation that discusses fighting the COVID-19 pandemic also using the Multimedia Development Life Cycle (MDLC) method. ILM itself functions as informing, persuading, reminding, and adding value. The data method taken using the accidental questionnaire technique obtained results from 65 respondents that there was a significant relationship between the public service advertising variable and the audience attitude variable (Ulum, Supriyati, & Listyorini, 2021). making PSAs using 2D animation that discusses fighting the COVID-19 pandemic also using the Multimedia Development Life Cycle (MDLC) method. ILM itself functions as informing, persuading, reminding, and adding value. The data method taken using the accidental questionnaire technique obtained results from 65 respondents that there was a significant relationship between the public service advertising variable and the audience attitude variable (Ulum, Supriyati, & Listyorini, 2021).

Public Service Advertisements (PSAs) are advertisements that are used to convey information, invite or educate the public where the ultimate goal is not to gain economic profit, but rather social profit. The social benefits in question are the emergence of increased knowledge, awareness of attitudes, and changes in people's behavior towards the problem being advertised, as well as gaining a good image in the eyes of society (Widyatama, 2007, p. 104).

PSAs communicate messages for the common good, for example about prohibiting drunk driving or advertising about preventing violence against children. Professional advertisers make them for free and the media often donate time and space to display these PSAs (Moriarty, Mitchell, & Wells, 2015, p. 16).

Judging from their themes, PSAs can be divided into three groups. Among them:

1. Prohibition and Satire Themes

The message conveyed from this theme is a message that must be obeyed and carried out, if it is not obeyed then there will be legal and psychological sanctions that will be received. PSAs in this group are said to be more assertive. The headlines on these advertisements generally read the words "don't", "stop", "prohibited", or "stop".

2. Warning Theme

The messages conveyed in warning-themed advertisements can be direct or indirect. A direct warning is a strong warning, generally using the words "caution", "beware", "avoid", and so on. Indirect commemoration is a commemoration or commemoration, for example, of independence day, earth day, environment day, and so on that are social in nature. PSAs with a warning theme generally warn of an existing problem, whether it has happened, has just happened, and is likely to happen in society.

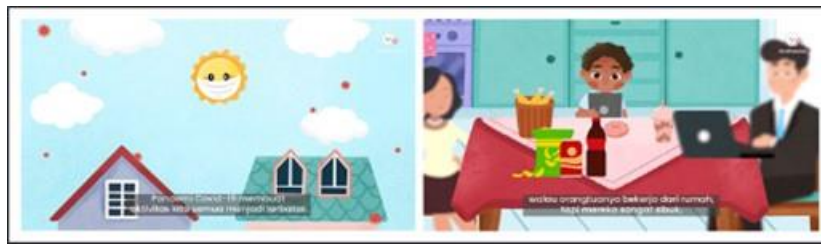
3. Appeal or Recommendation Theme

Public service advertisements with the theme of advice or recommendations usually use the words "so", "hope", "make sure", "prevent", "follow", "obey", and so on. The appeal in this advertisement invites the public to follow it. Advertisements with this theme only urge and recommend, but do not oblige (Pujiyanto, 2013, p. 203).

The animated ILM video "Healthy Body, Grow Strong" published via the EndCorona channel has two episodes. Both episodes tell the story of a child who lives an unhealthy lifestyle due to a shift in lifestyle during the pandemic. Next, the dangers of obesity itself are explained, as well as how to prevent it from an early age. The analysis of the animated video for the ILM "Healthy Body, Grow Strong" is as follows:

1. Episode 1

Figure 1
Initial Scene of the PSAs "Healthy Body, Grow Strong" Episode 1



Source: Processed data from creators, 2022.

The ILM begins by telling the time setting, namely during the pandemic, which requires everyone to carry out activities from their respective homes. The same thing happened to Obby, but both of his parents were also busy with their respective work matters. In this scene, the background music and voice over intonation still have a cheerful feel.

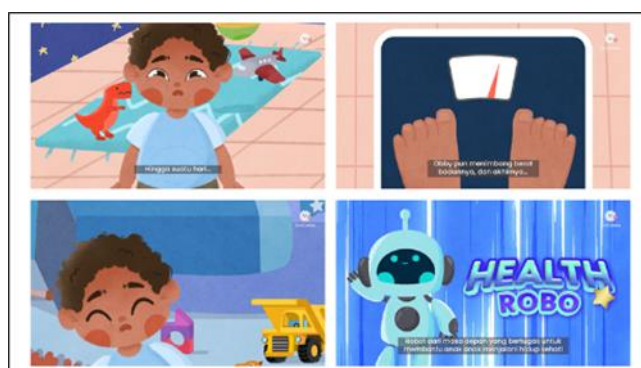
Figure 2
Obby's Unhealthy Lifestyle Scene in the PSAs "Healthy Body, Grow Strong" Episode 1



Source: Processed data from creators, 2022.

Next, a scene of the unhealthy lifestyle that Obby is living during this pandemic is shown. Such as eating fast food, playing games, playing gadgets, and sleeping. Obby continues to do this during this pandemic.

Figure 3
Scene of Obby Falling Sick in the PSAs "Healthy Body, Grow Strong" Episode 1



Source: Processed data from creators, 2022.

Because Obby continued to live an unhealthy lifestyle, one day Obby got fat and felt very weak. This scene wants to show the negative impact of a healthy lifestyle which can lead to being overweight or obese. In this scene, the background music changes from cheerful to scary. Obby weighed himself and then fell because he was shocked that his weight had increased so much.

Luckily, not long after that came Health-Robo, a robot character from the future whose job is to help children live healthy lives.

Figure 4
Infographic scene from the PSAs "Healthy Body, Grow Strong" Episode 1



Source: Processed data from creators, 2022.

Next, in this scene, Health-Robo explains information about obesity, starting from the rate of childhood obesity in Indonesia, its causes and negative impacts. In this scene, the information is conveyed through infographics, so it is not monotonous and can convey information through visual forms that attract children's interest. In this scene, the intonation of the voice over changes to frightening, as a form of fear appealing so that children can think that this information about obesity is really serious information.

Figure 5
Scene of Obby Living a Healthy Life in the PSAs "Healthy Body, Grow Strong" Episode 1



Source: Processed data from creators, 2022.

After learning information about obesity, in this scene Health-Robo helps Obby to live a healthy lifestyle. The background music changes to upbeat music and the intonation of the voice over becomes enthusiastic. Obby's clothes were changed into superhero costumes, to attract children's interest that living a healthy lifestyle is cool. These include avoiding ready-to-eat foods high in fat and sugar, eating 4 healthy 5 perfect foods, and doing physical activity for at least 30 minutes a day.

Figure 6
Final Scene of the ILM "Healthy Body, Grow Strong" Episode 1



Source: Processed data from creators, 2022.

In the final scene, it is shown that Obby is healthy, enthusiastic and cheerful again. Health-Robo also provides communication tools to Obby as a link between episodes 1 and 2. In this animated ILM video, Health-Robo and Obby also always urge the audience to live a healthy lifestyle. The creator of the work inserts words such as "Come on" "Avoid" "Make sure" "Don't forget" and so on as a form of persuasive communication which aims to invite and urge the audience to follow the message conveyed in the ILM animated video.

2.Episode 2

Figure 7

Initial Scene of the ILM "Healthy Body, Grow Strong" Episode 2



Source: Processed data from creators, 2022.

The ILM begins by telling the time setting, namely during the pandemic, which requires everyone to carry out activities from their respective homes. In this scene, the background music and voice over intonation still have a cheerful feel. The difference with episode 1 is that episode 2 features all the characters, namely Obby, Ronald, Cinta, and Nadya. Due to the COVID-19 pandemic, they also have to do online learning. Restrictions on activities also make them all bored at home.

Figure 8

Unhealthy Lifestyle Scene of Ronald, Cinta, and Nadya in the PSAs "Healthy Body, Grow Strong" Episode 2



Source: Processed data from creators, 2022.

Next, a scene of the unhealthy lifestyle that Ronald, Cinta, and Nadya are living during this pandemic is shown. Such as eating ready-to-eat food, playing games, playing gadgets, and sleeping up late. They continue to do this during this pandemic. In this scene, a comparison is given, namely Obby who always eats 4 healthy 5 perfect foods and is diligent in carrying out physical activities. The purpose of this comparison is to compare a healthy lifestyle with an unhealthy lifestyle which will have different impacts.

Figure 9

Scene of Ronald, Cinta, and Nadya experiencing weight gain in the ILM "Healthy Body, Grow Strong" Episode 2



Source: Processed data from creators, 2022.

Because Ronald, Cinta, and Nadya continued to live an unhealthy lifestyle, one day while taking online classes they looked fat, weak, and finally fell asleep. This scene wants to show the negative impact of a healthy lifestyle which can lead to being overweight or obese. In this scene, the background music changes from cheerful to scary. Luckily Obby immediately realized and called Health-Robo. Luckily, not long after that came Health-Robo, a robot character from the future whose job is to help children live healthy lives.

Figure 10

Infographic scene in the PSAs "Healthy Body, Grow Strong" Episode 2



Source: Processed data from creators, 2022.

Next, in this scene, Health-Robo and Obby explain information about obesity, starting from what obesity is, the rate of childhood obesity in Indonesia, its causes and negative impacts. In this scene, the information is conveyed through infographics, so it is not monotonous and can convey information through visual forms that attract children's interest. In this scene the intonation of the voice over changes to frightening, as a form of fear appealing so that children can assume that this information about obesity is really serious information.

Figure 11

Scene of Obby, Ronald, Cinta, and Nadya Living a Healthy Life in the PSAs "Healthy Body, Grow Strong" Episode 2



Source: Processed data from creators, 2022.

After learning information about obesity, in this scene Health-Robo helps Obby, Ronald, Cinta, and Nadya to live a healthy lifestyle. The background music changes to upbeat music and the intonation of the voice over becomes enthusiastic. Obby, Ronald, Cinta and Nadya's clothes were changed into superhero costumes, to attract children's interest that living a healthy lifestyle is a cool thing. These include avoiding ready-to-eat foods high in fat and sugar, eating 4 healthy 5 perfect foods, and doing physical activity for at least 30 minutes a day.

Figure 12

Final Scene of PSAs "Healthy Body, Grow Strong" Episode 2



Source: Processed data from creators, 2022.

In the final scene, it is shown that Obby, Ronald, Cinta, and Nadya are healthy, enthusiastic and cheerful again. Health-Robo also provides communication tools to Obby as a link between episodes 1 and 2. In this animated ILM video, Health-Robo and Obby also always urge the audience to live a healthy lifestyle. The creator of the work inserts words such as "Come on," "Avoid," "Make sure," "Don't forget," and so on as a form of persuasive communication that aims to invite and urge the audience to follow the message conveyed in the ILM animated video.

The animated ILM video "Healthy Body, Grow Strong" was produced with the aim of raising awareness about the risks of post-COVID-19 obesity and encouraging people to prevent it by living a healthy lifestyle. The creation of this work uses Persuasive Communication Theory and uses the Multimedia Development Life Cycle (MDLC) stages. The work created in collaboration with the EndCorona organization has a real impact on audiences on the YouTube platform in building their awareness of maintaining a healthy lifestyle during the pandemic. The animated video and promotional PSAs "Healthy Body, Grow Strong" were produced for parents who have children aged 5-12 years and children aged 5-12 years who have unhealthy lifestyles and are obese.

4. CONCLUSION

Public Service Advertisements (PSAs) are advertisements that are used to convey information, invite or educate the public where the ultimate goal is not to gain economic profit, but rather social profit. The social benefits in question are the emergence of increased knowledge, awareness of attitudes, and changes in people's behavior towards the problem being advertised, as well as gaining a good image in the eyes of the public. The animated ILM video "Healthy Body, Grow Strong" was produced with the aim of raising awareness about the risks of post-COVID-19 obesity and encouraging people to prevent it by living a healthy lifestyle. The creation of this work uses Persuasive Communication Theory and uses the Multimedia Development Life Cycle (MDLC) stages. The work created in collaboration with the EndCorona organization has a real impact on audiences on the YouTube platform in building their awareness of maintaining a healthy lifestyle during the pandemic. The animated video and promotional PSAs "Healthy Body, Grow Strong" were produced for parents who have children aged 5-12 years and children aged 5-12 years who have unhealthy lifestyles and are obese.

5. BIBLIOGRAPHY

- Ardella, K. B. (2020, Oktober). Risiko Kesehatan Akibat Perubahan Pola Makan Dan Tingkat Aktivitas Fisik Selama Pandemi COVID-19, 02, 293. <https://www.jurnalmedikahutama.com/index.php/JMH/article/download/73/45>
- Binanto, I. (2010). *Multimedia Digital: Dasar Teori dan Pengembangannya*. Penerbit ANDI.
- Brocato, D. (2010). *Push and Pull Marketing Strategies*. <https://doi.org/10.1002/9781444316568.wiem01053>
- Chaffey, D., Smith, P. R., & Smith, P. R. (2013). *Emarketing Excellence: Planning and Optimizing Your Digital Marketing* (P. R. Smith, Ed.). Routledge.
- Ciampa, R., Moore, T., Carucci, J., Muller, S., & Wescott, A. (2015). *YouTube Channels for Dummies*. John Wiley & Sons, Inc.
- Clow, K. E., & Baack, D. (2018). *Integrated Advertising, Promotion, and Marketing Communications* (8th ed.). Pearson.
- Dery Caropeboka. (2017). *Infografis Iklan Layanan Masyarakat: Sayur dan Buah Kementerian Kesehatan RI*. [Video]. <https://www.YouTube.com/watch?v=XPXRLlvDOhU&t=2s>
- DetikHealth. (2011, April 14). *Warna Bisa Pengaruhi Psikologis Anak*. detikHealth. Retrieved June 2, 2022, from <https://health.detik.com/ibu-dan-anak/d-1617042/warna-bisa-pengaruh-psikologis-anak>
- Direktorat Promkes dan PM Kemenkes RI. (2018). *Poster Gerakan Masyarakat Hidup Sehat (GERMAS)*. <https://promkes.kemkes.go.id/poster--germasfebruari70x100cm>
- Direktorat Promkes dan PM Kemenkes RI. (2020). *TV Spot Pencegahan Penyakit Tidak Menular (PTM) Obesitas (versi 60 detik)*. [Video]. <https://www.YouTube.com/watch?v=rYjV-mK4vFA>
- EndCorona. (n.d.). *About Us*. EndCorona. Retrieved May 31, 2022, from <http://endcorona.fk.ui.ac.id/>
- Goleman, D. (2019). *Self-Awareness (HBR Emotional Intelligence Series)*. Harvard Business School Publishing Corporation.
- Hanifan, A. F. (2016, Juli). *Obesitas Mengancam Anak Indonesia*. Tirto.id. <https://tirto.id/obesitas-mengancam-anak-indonesia-bsWA>
- Helianthusonfri, J. (2021). *15+ Social Media Marketing Apps*. PT Elex Media Komputindo.
- Hendri, E. (2019). *Komunikasi Persuasif: Pendekatan dan Strategi*. PT Remaja Rosdakarya.
- Husnulizzah. (2016). *Ayo Kita Cegah Obesitas! Motion Graphic Animation (Campaign Obesitas untuk Anak SD)*. [Video]. <https://www.YouTube.com/watch?v=nQP4iCR2PTE>
- Jubilee Enterprise. (2021). *Instagram untuk Bisnis, Hobi, dan Desain Grafis*. PT Elex Media Komputindo.

- Kementerian Kesehatan Direktorat Promosi Kesehatan dan Pemberdayaan Masyarakat. (2017, Desember). GERMAS - Gerakan Masyarakat Hidup Sehat. <https://promkes.kemkes.go.id/germas>
- Kementerian Kesehatan Republik Indonesia. (2021, Maret 25). Pandemi COVID-19 Tingkatkan Risiko Obesitas Pada Anak. Sehat Negeriku. <https://sehatnegeriku.kemkes.go.id/baca/umum/20210324/4037345/pandemi-COVID-19-tingkatkan-risiko-obesitas-pada-anak/>
- Keutelian, M. (2022). The Best Times to Post on Social Media in 2022. <https://sproutsocial.com/insights/best-times-to-post-on-social-media/>
- Khusuma, E. (2016, Juli). Fakta-fakta Tentang Rizki, Bocah Obesitas yang Kondisinya Lebih Parah Dari Arya. IDN Times. <https://www.idntimes.com/news/indonesia/erwanto/fakta-tentang-rizki-bocah-obesitas-yang-alami-koma/4>
- Kotler, P., Armstrong, G., & Opresnik, M. O. (2018). Principles of Marketing 17th ed. (17th ed., Global Ed.). Harlow: Pearson. <http://rezakord.com/uploAds/91b0c5c8c158421fa332a449c435e1b4.pdf>
- Lankow, J., Ritchie, J., & Crooks, R. (2014). INFOGRAFIS: Kedasyatan Cara Bercerita Visual. Penerbit PT Gramedia Pustaka Utama.
- Masri, S. (2020). Multicultural Awareness, Teknik Cinemeducation, dan Bibliotherapy. Penerbit Aksara Timur.
- McQuail, D. (2011). Teori Komunikasi Massa McQuail (6th ed., Vol. 1). Penerbit Salemba Humanika.
- Moriarty, S., Mitchell, N., & Wells, W. (2015). Advertising: Principles and Practices (8th ed.). Prenadamedia Group.
- Nasrullah, R. (2017). Media Sosial: Perspektif Komunikasi, Budaya, dan Sioteknologi. Simbiosis Rekatama Media.
- NorthShore University Healthsystem. (n.d.). K-8 (5 - 12 years). <https://www.northshore.org/pediatrics/ages-and-milestones/k-8-5---12-years/>
- Nurudin. (2007). Pengantar Komunikasi Massa. PT Rajagrafindo Persada.
- Pamungkas, I. N. A. (2016). IMC"0"Logy. Deepublish.
- Papoi AO. (2017). Infografis Iklan Layanan Masyarakat tentang Obesitas di Indonesia. [Video]. <https://www.YouTube.com/watch?v=ltPWgzq9Mtk>
- Perloff, R. M. (2017). The Dynamics of Persuasion: Communication and Attitudes in the 21st Century (6th ed.). Routledge.
- Perreault, W. D., Cannon, J. P., & McCarthy, E. J. (2011). Basic Marketing: A Marketing Strategy Planning Approach (18th ed.). McGraw-Hill/Irwin.
- PT Astra International Tbk. (n.d.). Pendeteksi Risiko COVID-19 Lewat Aplikasi EndCorona – SATU Indonesia Awards. SATU Indonesia. Retrieved May 31, 2022, from <https://www.satu-indonesia.com/satu/satuindonesiaawards/finalis/pendeteksi-risiko-COVID-19-lewat-aplikasi-endcorona/>
- Pujiyanto. (2013). Iklan Layanan Masyarakat. Penerbit ANDI.
- Putra, R. W. (2021). Pengantar Desain Komunikasi Visual dalam Penerapan. Penerbit ANDI.
- Rachmawati. (2019, Oktober 2). 5 Kasus Obesitas di Indonesia, Bobot Turun 112 Kg hingga Meninggal Setelah Sesak Nafas. Kompas. <https://regional.kompas.com/read/2019/10/02/06060031/5-kasus-obesitas-di-indonesia-bobot-turun-112-kg-hingga-meninggal-setelah?page=all>
- Sadiman, A. S. (2009). Media Pendidikan. PT Raja Grafindo Persada.
- Sari, A. F., Sari, N. P., & Nabila. (2019). Promosi Kesehatan “Sadari” Menggunakan Instagram pada Mahasiswi Non Kesehatan Universitas Andalas, 15(3). <https://journal.unhas.ac.id/index.php/mkmi/article/view/6270/pdf>

- Suryani, R., Saputra, H., & Sutrisman, A. (2019). Implementasi Animasi 2D pada Iklan Layanan Masyarakat sebagai Sosialisasi Penyakit DBD, 15(2). <https://doi.org/10.24821/rekam.v15i2.3330>
- Sutopo, A. H. (2003). Multimedia Interaktif dengan Flash. Graha Ilmu.
- The Lancet Public Health. (2021, Agustus). Childhood obesity beyond COVID-19, 6(8). [https://doi.org/10.1016/S2468-2667\(21\)00168-7](https://doi.org/10.1016/S2468-2667(21)00168-7)
- Ulum, S., Supriyati, E., & Listyorini, T. (2021). Iklan Layanan Masyarakat Bertahan Melawan Pandemi COVID-19, 1(2). <https://www.jurnal.umk.ac.id/index.php/detika/article/view/5845>
- United Nations International Children's Emergency Fund. (2020, May 11). A Nutrition Crisis. COVID-19 and Children in Indonesia: An Agenda for Action to Address Socio-Economic Challenges. https://www.unicef.org/indonesia/sites/unicef.org/indonesia/files/2020-05/COVID-19-and-Children-in-Indonesia-2020_0.pdf
- Universitas Indonesia [@univ_indonesia]. (n.d.). Posts [Instagram profile]. Instagram. Retrieved May 31, 2021, from https://www.instagram.com/univ_indonesia/
- Utami, F. R., Yasmin, A., Srihartantri, F., Ramadhania, F., Safitri, F. M., Amalia, F., Ambarwati, I., Nikmah, I. Z., & Iswari, Y. (2021). Pengaruh Video Penyuluhan Kesehatan Tentang Obesitas Bagi Anak Usia Sekolah Dasar, 5(1). <https://akper-pasarrebo.e-journal.id/nurs/article/view/82>
- Vaughan, T. (2011). Multimedia: Making It Work (8th ed.). McGraw-Hill.
- Widyatama, R. (2007). Pengantar Periklanan. Pustaka Book Publisher.
- World Health Organization. (2019, April 24). To grow up healthy, children need to sit less and play more. <https://www.who.int/news/item/24-04-2019-to-grow-up-healthy-children-need-to-sit-less-and-play-more>
- World Health Organization. (2020, November 26). Physical activity. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
- World Health Organization. (2021, Juni 9). Obesity and overweight. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
- World Obesity Federation. (2021, Maret). COVID-19 and Obesity: The 2021 Atlas. <https://data.worldobesity.org/publications/COVID-19-and-Obesity-The-2021-Atlas.pdf>
- Wright, J. A. (2005). Animation Writing and Development: From Script Development to Pitch. Elsevier.