



## The Role of Covid-19 Information in Social Media on Knowledge and Behavior of the Semarang City Community

Rani Tiara Desty , Wahyuni Arumsari  
Ivet University, Indonesia

### Article Info

Article History:  
Submitted 04 Maret 2022  
Accepted 15 April 2022  
Published 30 April 2022

Keywords:  
Social media; knowledge;  
behavior; COVID-19

DOI  
<https://doi.org/10.15294/jhe.v7i1.55262>

### Abstract

**Background:** Social media is one of the fastest ways to deliver information with internet technology. News of COVID-19 is broadcast on various media, one of which is social media. The city of Semarang is in the first place with the largest number of cases in Central Java Province with 95.176. The purpose of this study was to determine the relationship between the quality of COVID-19 information on social media and public response, the relationship between public response to knowledge, and the relationship between knowledge and community behavior regarding COVID-19.

**Methods:** This study uses an analytic observational study with a cross-sectional design. The research sample is Semarang residents who have social media with an age range of 15-65 years.

**Results:** The results showed that there is a significant relationship between the quality of COVID-19 information on social media and public response ( $p=0,00$ ). There is a significant relationship between public response and knowledge related to COVID-19 ( $p=0,022$ ). There is a significant relationship between the knowledge and behavior of respondents ( $p=0,027$ ).

**Conclusions:** Providing valid, specific, and reliable information on social media can improve the behavior of prevention efforts against COVID-19.

 Correspondence Address:  
Email : [ranitiaradesty@ivet.ac.id](mailto:ranitiaradesty@ivet.ac.id)

## INTRODUCTION

Social media is one of the fastest ways to convey information with internet technology. Accurate, precise and up-to-date information is increasingly needed along with the rapid development of information technology. This encourages people to take advantage of this information (Rulli, 2015). According to Global Digital Reports, the number of internet users in Indonesia in January 2022 reached 204.7 million, this number increased by 2.1 million (1%) from the previous year. Of the 204.7 million internet users, 191.4 million are social media users. This number increased by 12.6% from the previous year (GDR, 2021). The widespread use of social media can also influence people's behavior and health goals through social reinforcement. The information presented on social media is an actual event that is happening (George et al., 2013).

COVID-19 is one of the news that is currently being discussed by the public. This disease is caused by a new type of coronavirus, namely SARS-Cov-2 which has infected many people in Indonesia (Handayani et al., 2020). The National Disaster Management Agency (BNPB) reported that the total cases of COVID-19, as of February 20, 2022, reached 5,197,505 confirmed people and 146,365 people died (Gugus Tugas Covid-19, 2021). Central Java is a province that ranks third at the national level with 535,139 confirmed cases (Provinsi Jawa Tengah, 2021). Semarang City is in the first place with the largest number in Central Java Province. According to the Semarang City Health Office, confirmed cases that have been found in Semarang City as of February 20, 2022, amounted to 95,176 cases with a death toll of 4878 people (Pemekot Semarang, 2021). News of COVID-19 is broadcast on various media, one of which is social media (social interaction applications such as Facebook, Instagram, and Twitter). Communication is an important step in conveying the information that a person or society needs (Syaipudin, 2020). Information about Covid-19 is shared by various parties on social media to educate the public..

The use of electronic mass media is an option for various parties to communicate with the public and convey the latest information related to handling COVID-19 because most people have easy access to it. The role of the

mass media is needed as one of the solution steps in handling the impacts caused by the COVID-19 pandemic (Syaipudin, 2020).

Dewiyuliana's research (2020) states that one of the distributions of information on WhatsApp is proven to be able to increase the preparedness of the Acehnese people in dealing with the COVID-19 disaster (Dewiyuliana, 2020). On the other hand, another study conducted by Herman (2021) that the use of social media can increase knowledge about the prevention of COVID-19 (Herman, 2021). Research results from Desty (2021) show that there is a significant relationship between the quality of messages related to COVID-19 on social media and respondents' behavior regarding COVID-19 ( $p = 0.014 < 0.05$ ) (Desty et al., 2021). Online education using video media as well as leaflets is more effective in increasing public knowledge regarding the prevention of COVID-19 in Baubau City (Sabarudin et al., 2020).

In this case, social media has great potential to carry out health promotion and other health interventions, and it is easier to reach targets at every level. Based on the Stimulus-Organism-Response theory, in this case, social media can have an influence or response such as attitudes and behavior to the recipient of the message (Effendy, 2017). The purpose of this study was to determine the relationship between the quality of COVID-19 information on social media and public response, the relationship between public response to knowledge related to COVID-19, and the relationship between knowledge and community behavior in Semarang City regarding COVID-19. So that stakeholders involved in dealing with COVID-19 must provide clear and easy-to-understand information for the public.

## METHODS

This study used an analytical observational study with a cross-sectional design. The research location was taken in Semarang City, which will be held from June-July 2021. The population in this study is the entire community in Semarang City. The research sample is the people of the city of Semarang who have social media with an age range of 15-65 years. The sample is calculated

using the minimum sample formula for quantitative research, namely the Taro Yamane formula with a total sample of 100 people.

The sampling method used is accidental sampling by removing respondents who are not actively using social media as an exclusion criterion. Data collection was carried out by direct interviews with respondents using a questionnaire as a tool. The instrument used is a questionnaire that has been tested and is valid and reliable with a value of 0.789.

The questionnaire contains open and closed questions that are used to obtain information related to socio-demography, community responses to messages related to COVID-19, knowledge related to COVID-19 and behavior in handling COVID-19.

Message quality was assessed using 11 closed-ended questions. Each question has several answer options consisting of yes, no, and no. The answer yes is given a value of 2, doubtful is given a value of 1, while not given a value of 0. In this study, the quality of the messages assessed includes the truth of the information, the impact of information on understanding, visualization of messages on social media, respondents' satisfaction with information, and the content of related messages. COVID-19, message structure, message source, message appeal, and language used in COVID-19-related messages on social media.

Public responses regarding COVID-19 information on social media were assessed using 8 closed-ended questions. Each question has several answer options consisting of yes and no answers. The answer yes is given a value of 1, while the answer is not given a value of 0. In this study, the response of the community that was assessed included the activeness of the respondent in seeking information, the respondent could understand the information, the respondent paid attention to the information, the respondent trusted the information, the respondent was able to distinguish hoax news correctly, the respondent confirmed the truth of the information, respondents are motivated to follow information related to Covid-19 on social media.

Knowledge related to COVID-19 consists of 10 closed-ended questions. Each statement has 3 answer options, namely true, undecided

and false. The elements of knowledge assessed include COVID-19 symptoms, COVID-19 treatment, ways of transmitting COVID-19, ways to prevent COVID-19 by using masks, staying away from crowds, washing hands with soap, maintaining distance and vaccinations.

Behavior is assessed by asking questions about efforts to deal with COVID-19 which include, efforts to use masks when doing activities or leaving the house, efforts to practice hygiene by washing hands and using hand sanitizers, efforts to keep a distance from other people when doing activities outside the home, efforts to avoiding crowded places, efforts not to travel to red zone areas, and efforts to maintain physical fitness. Answers are offered with yes and no options on the given closed questions.

The data then goes through the process of coding, recapitulation, tabulation and statistical analysis. Statistical analysis used is univariate and bivariate data analysis with SPSS Version 24 application program. Univariate analysis displays the frequency distribution in tabulated form. Each presentation on the question is categorized according to Koentjaningrat (2008) into; none (0%), some (1-25%), almost half (26-49%), half (50%), more than half (51-75%), almost all (76-99%), and entirely (100%). While bivariate analysis is used to determine the relationship between the message quality variable and the response variable from the community, the response from the community to knowledge, and the knowledge variable to the behavioral variable. The bivariate analysis used was through the Chi-Square hypothesis test which was adjusted between the analyzed variables. The results of the analysis were adjusted to a p-value = 0.05.

## RESULTS AND DISCUSSIONS

Based on Table 1, the characteristics of the respondents in this study consisted of age; gender; marital status; level of education; and job. The age of the respondents in this study ranged from 15-65 years. The results showed that half of the respondents were 50 people (50%) aged 26-35 years, and more than half, namely 63 people (63%) were women. Almost half of the 46 people (46%) have a bachelor's degree. The jobs owned by the most respondents are 23 people (23%) as Private Employees.

**Table.1** Respondent's Characteristics

Characteristics	Frequency	%
<b>Age</b>		
15-25 years old	36	36
26-35 years old	50	50
36-45 years old	12	12
46-65 years old	2	2
<b>Gender</b>		
Female	63	63
Male	37	37
<b>Marital Status</b>		
Not married yet	47	47
Merried	50	50
Widow / widower	3	3
<b>Level of Education</b>		
Junior High School	2	2
Senior High School	19	19
Diploma	10	10
Bachelor	46	46
Master	23	23
<b>Job</b>		
Not yet/Jobless	20	20
Private Employee	23	23
Enterpreneur	7	7
Civil Servant	19	19
Teacher / lecturer	16	16
Freelancer	4	4
Other	11	11

The age of majority of respondents in this study was in the age range of 15--35 years. The age difference is an important predictor of a person's acceptance of health. These results are in line with the characteristics of a survey conducted by the Association of Indonesian Internet Service Providers (APJII) in 2018 with the highest number of internet users in the age group 15-34 years old, 84.7% (APJII, 2019). Gender differences in respondents make different activities in using social media. Women (54%) access social media more often with 4-6 hours per day compared to men. This is supported by a survey conducted by the Ministry of Women's Empowerment and Child Protection in 2018 which stated that women use the internet more for email and to obtain health and religious information (Kementrian PPAS, 2018). This is in line with research conducted by Moudy (2020), that female respondents are more likely to participate in health-themed research than males (Moudy , 2020).

**Table 2.** Community Responses in Receiving Messages related to Covid-19

Question	Yes	%	No	%
Did you get any information related to Covid-19 from social media?	92	92	8	8
Are you actively looking for information related to Covid-19 on social media?	66	66	34	34
Are you able to understand information related to Covid-19 on social media?	87	87	13	13
Are you paying attention to information related to Covid-19 on social media?	89	89	11	11
Do you trust information regarding Covid-19 on social media?	68	68	32	32
ACan you distinguish Hoax news from true news regarding Covid-19 from social media?	80	80	20	20
Do you confirm the truth of the news you get about Covid-19 from Social media?	71	71	29	29
Can you be motivated to follow Covid-19-related information on social media?	60	60	20	20

The description of the response from the public in receiving messages related to Covid-19 is by asking about what respondents have obtained and done from information about Covid-19 from social media. The results of univariate analysis of public responses to COVID-19 messages on social media show that more than half of respondents (66%) are actively

seeking information related to Covid-19 on social media. Almost all respondents (87%) can understand information about Covid-19 that is read on social media.

Almost all respondents (89%) pay attention to information about Covid-19 on social media. More than half (68%) of respondents believe information related

to Covid-19 on social media. Almost all respondents (80%) can distinguish hoaxes from true news related to Covid-19 from social media. More than half (71%) of respondents confirm the truth of the news you get about Covid-19 from Social media. More than half (60%) are motivated to follow information related to Covid-19 on social media.

In this study, respondents have broadened their thinking horizons by actively seeking information about Covid-19 and activating

critical thinking power by confirming hoax news obtained on social media by looking for Covid-19 information on official websites from the government, accompanied by looking for references from sources. who can be trusted? This is in line with Kaya's (2020) research which states that social media users are aware of fake news. They follow social media accounts of official government institutions or organizations to validate news on social media (Kaya, 2020).

**Table. 3** Distribution of Respondents' Knowledge regarding Covid-19

Questions	True	%	Uncertain	%	False	%
The main clinical symptoms of COVID-19 are fever, fatigue, dry cough, and body aches	91	91	9	9	0	0
There is currently no effective drug for treating COVID-19.	84	84	14	14	2	2
Treatment that can be done at this time is to relieve common symptoms of the disease caused by COVID-19.	82	82	13	13	5	5
The COVID-19 virus is spread through the droplets of an infected person.	86	86	10	10	4	4
COVID-19 virus spreads through the air	53	53	31	31	16	16
Wearing a mask is one way to prevent the spread of the COVID-19 virus	96	96	4	4	0	0
To prevent the transmission of COVID-19, individuals should avoid going to crowded places and avoid using public transportation	91	91	9	9	0	0
Isolation and treatment of people infected with the COVID-19 virus is an effective way to reduce the spread of the virus	92	92	7	7	1	1
People who come into contact with someone infected with the COVID-19 virus must self-isolate for 14 days	88	88	9	9	3	3
Vaccines can prevent a person from becoming infected with COVID-19	38	38	30	30	32	32

The description of respondents' knowledge about Covid-19 shows that almost all respondents (91%) know the main clinical symptoms of COVID-19 such as fever, fatigue, dry cough, and body aches. Almost all respondents (84%) answered the question correctly that there is no effective drug for treating COVID-19. Almost all respondents (82%) already know that the current treatment that can be done is to relieve common symptoms of the disease caused by COVID-19. Only a small percentage of respondents (4%) answered incorrectly that the COVID-19 virus can spread through droplets of infected people. More than half (53%) of respondents answered correctly that the COVID-19 virus can spread through the air.

Almost all respondents (96%) know

that wearing a mask is an effort to prevent the spread of the COVID-19 virus. Almost all respondents (91%) answered the question correctly that individuals should avoid going to crowded places and avoid using public transportation to prevent the transmission of COVID-19. Almost all (92%) respondents know that isolating and treating people infected with the COVID-19 virus is an effective way to reduce the spread of the virus. Almost all (88%) of respondents answered the question correctly that people who come into contact with someone infected with the COVID-19 virus must isolate for 14 days. Nearly a third (30%) of respondents said they doubted that vaccination could prevent someone from becoming infected with COVID-19. More than half of the respondents have good knowledge



regarding COVID-19, which is 57%. This is in line with Moudy's research (2020) that 76.9% of respondents have good knowledge regarding COVID-19 (Moudy, 2020).

**Table 4.** The Association between Message Quality and Public Response

Independent Variable	Community Respond's				Total		OR 95% CI	p-value
	Good		Less		f	%		
	F	%	F	%			f	%
<b>Message Quality</b>								
Good	34	70,8	14	29,2	48	100,0	5,21	0.00
Less	18	34,6	34	65,4	52	100,0	(2,19-12,35)	

Based on the table above, it is known that the results of the cross-tabulation of 48 respondents who rated well about the quality of messages accessed on social media related to Covid-19 showed a good response to as many as 34 people (70.8%). The results of the statistical test showed that there was a significant relationship between the quality of messages related to Covid-19 on social media and the public's response to Covid-19 information on social media ( $p=0.00 <0.05$ ). The poor quality of messages related to COVID-19 on social media tends to be responded to poorly by the public, which is 5.21 times compared to those with good message quality.

This is in accordance with Ahmad (2020) who stated that social media has played an important role in influencing society during the COVID-19 pandemic. The results of the statistical test showed that there was a significant correlation ( $R=8,701$ ) between social media and the panic response to the spread

of COVID-19 information. People cannot distinguish between true and false information, causing panic (Ahmad, 2020). Han (2020) stated that accurate and timely information from the Government can help stabilize public opinion towards the prevention and handling of COVID-19 (Han et al., 2020).

On the other hand, Yuniarto (2021) stated that there was a significant relationship ( $p = 0.007$ ) between hoax information and not about Covid-19 with attitudes or responses when receiving hoax information about COVID-19 (Yuniarto et al., 2021). In line with this, Alington (2020) stated that there was a significant relationship between the choice of social media as a source of information and the level of belief and practice in preventing COVID-19 with a value ( $p = 0.001$ ) (Allington et al., 2021). Information sources can increase knowledge to produce positive prevention practices (Notoatmodjo, 2014a).

**Table 5.** Association between community response and knowledge

Independent Variable	Respondent's Knowledge				Total		OR 95% CI	p-value
	Good		Less		f	%		
	F	%	F	%			f	%
<b>Community Respond's</b>								
Good	37	67,3	18	32,7	55	100,0	2,56	0,022
Less	20	44,4	25	55,6	45	100,0	(1,13-5,80)	

Based on the table above, it is known that the results of the cross-tabulation of 55 respondents who responded well to information about Covid-19 on social media showed good knowledge of 37 people (67.3%). The results of the statistical test showed that there was a significant relationship between the response from the public to information about Covid-19 on social media and the respondent's knowledge about Covid-19 ( $p = 0.022 <0.05$ ). People who

respond less to COVID-19 information on social media tend to be less knowledgeable by 2.56 times compared to those who respond well.

Social media users will interact and share the information obtained on social media. They will exchange the information and knowledge they have. They will modify the information that has been obtained and answer questions from other users and integrate the old information

with the new so that other users gain new knowledge and will share the information with other users (Wei et al., 2012). According to Notoatmodjo (2014) the factors that influence knowledge include education, mass media, socio-cultural and economic, environment, experience and age (Notoatmodjo, 2014).

This is in line with Ramadhan (2017), social media significantly influences the formation of adolescent perceptions of reproductive health (Ramadhan, 2017). This is in line with the results of Aisyah's research (2020) which states that there is an effect of intervention through social media before and after the test in the intervention group ( $p = 0.000$ ). Social media through the internet has great potential for health promotion and other health interventions and it is easier to reach targets at every level (Aisyah et al., 2020).

On the other hand, these results are also in line with the results of a bivariate analysis of research conducted by Sari (2021) which stated that there is a relationship between access to social media and knowledge of Covid-19 prevention in coastal communities

in Wawolesea District in 2020. This is because those who access social media can obtain more information because of the large amount of content related to the prevention of Covid-19 both in the form of leaflets and interesting audiovisuals disseminated by official institutions and the public so that it will make it easier for someone to receive this information and is supported by the government's policy to stay at home, work from home and study from home so that respondents access social media more to increase knowledge related to Covid-19 prevention (Sari et al., 2020). According to Farooq's research (2020), The use of social media contributes to information that can provide more knowledge to the public about Covid-19 (Farooq et al., 2020). The theory of used and gratification, states that individuals have the freedom to choose the channel and type of information that will be the media and vice versa. However, individuals must have high literacy skills to distinguish whether the information accessed can be trusted or not. (Karman, 2013).

**Table 6.** The association between knowledge and behavior in handling COVID-19

Independent Variable	Respondent's Behavior				Total	OR 95% CI	p-value	
	Good		Less					
	F	%	F	%				f
<b>Respondent's Knowledge</b>								
Good	49	86,0	8	14,0	57	100,0	2,95	0,027
Less	29	67,4	14	32,6	43	100,0	(1,10-7,89)	

Based on the table above, the results of the cross-tabulation are known from 57 respondents who have good knowledge about Covid-19 showing good behavior as many as 49 people (86.0%). The results of the statistical test showed that there was a significant relationship between the respondents' knowledge of the quality of information about Covid-19 and the respondent's behavior regarding the handling of Covid-19 ( $p=0.027>0.05$ ). Respondents with less knowledge have a risk of misbehaving in implementing health protocols by 2.95 times compared to respondents with good knowledge.

his is in line with Moudy's 2020 research which shows there is a significant relationship between individual knowledge

and individual actions regarding COVID-19 ( $p = 0.000 < 0.005$ ) (Moudy, 2020). This is also in line with Desty's research (2021) which shows that there is a significant relationship between respondents' knowledge of Covid-19 and the behavior of implementing health protocols ( $P$ -value = 0.01) (Desty et al., 2021). Adaptation theory states that a good level of knowledge can encourage a person to have good actions as well (Silalahi, 2013). The results of this study are in line with other clinical studies, where of 1,102 respondents in Indonesia, the majority of respondents have a good level of knowledge regarding social distancing in the context of preventing the transmission of COVID-19 with a prevalence of 99% (Yanti et al., 2020).

With the exponential technological advances over the last few decades, social media seems to be the most sensible way to promote change in public health behavior to enhance protective measures against COVID-19 (Al-Dmour et al., 2020). This is in line with Elygio's research (2020) which states that there is a significant relationship between knowledge and prevention efforts from the COVID-19 pandemic ( $p=0.015$ ) (Elygio et al., 2020). From some of these studies, it can be seen that knowledge is an important aspect that needs to be considered in solving problems, especially related to COVID-19.

Based on the results of this study, strategies and initiatives from the Government are needed to optimize the use of social media as a means of health promotion. So that people can use the system that has been created if they feel they can benefit from the information, such as reducing potential health problems. Social media is currently one of the easiest means to promote behavior to prevent the transmission of COVID-19. Apart from being a promotional medium, social media can also be used to educate about proactive health care and management related to COVID-19. It is hoped that the use of social media as a means of preventing COVID-19 can be carried out comprehensively and sustainably by official health websites from the government, such as the Ministry of Health, the National Disaster Management Agency and the Provincial and District/City Health Offices.

## CONCLUSION

Based on the results of the research that has been done, more than half of the respondents assessed that the quality of messages about COVID-19 on social media is still not good. Less than half of the respondents responded poorly to COVID-19 messages on social media. Almost all respondents have good knowledge regarding COVID-19, and almost all respondents have good behavior in dealing with COVID-19. The results of the cross-tabulation show that the quality of messages related to COVID-19 on social media has a relationship with the public's response to the information. The response to the community has a relationship with knowledge about

COVID-19. Knowledge related to COVID-19 has been shown to have a relationship with COVID-19 prevention behavior in the people of Semarang City.

The government needs to develop strategies and initiatives to optimize the use of social media as a means of health promotion by providing comprehensive and sustainable information on social media owned by the Ministry of Health, the National Disaster Management Agency and the Central Java Provincial Health Office and the Semarang City Health Office. In this study, we have not analyzed other enabling factors that can affect the knowledge and behavior of respondents regarding the handling of Covid-19. The researcher suggests that further research be conducted on other enabling factors that can affect the knowledge and behavior of respondents by using both quantitative and qualitative methods.

## REFERENCES

- Ahmad, A. R., & Murad, H. R. (2020). The impact of social media on panic during the COVID-19 pandemic in iraqi kurdistan: Online questionnaire study. *Journal of Medical Internet Research*, 22(5), 1–11. <https://doi.org/10.2196/19556>
- Aisyah, S., Syafar, M., & Amiruddin, R. (2020). Pengaruh Media Sosial Untuk Meningkatkan Pengetahuan Dan Sikap Remaja Tentang Hiv & Aids Di Kota Parepare. *Jurnal Kesehatan Masyarakat Maritim*, 3(1). <https://doi.org/10.30597/jkmm.v3i1.10299>
- Al-Dmour, H., Masadeh, R., Salman, A., Abuhashesh, M., & Al-Dmour, R. (2020). Influence of social media platforms on public health protection against the COVID-19 pandemic via the mediating effects of public health awareness and behavioral changes: Integrated model. *Journal of Medical Internet Research*, 22(8), 1–15. <https://doi.org/10.2196/19996>
- Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J. (2021). Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency. *Psychological Medicine*, 51(10), 1763–1769. <https://doi.org/10.1017/S003329172000224X>
- Asosiasi Penyedia Jaringan Internet Indonesia. (2019). Penetrasi & Profil Perilaku Pengguna Internet Indonesia 2018. In *Apjii*. [www.apjii](http://www.apjii).



- or.id
- Desty, R. T., Arumsari, W., & Rohmah, S. (2021). Pengetahuan, Sikap dan Perilaku Pencegahan COVID-19 pada Pedagang di Pasar Sampangan Kota Semarang. *Indonesian Journal of Health Community*, 2(1), 19. <https://doi.org/10.31331/ijheco.v2i1.1631>
- Dewiyuliana, & Septiana, N. (2020). Pengaruh Penyebaran Informasi Covid-19 Melalui Whatsapp terhadap Kesiapsiagaan Masyarakat dalam Menghadapi Covid-19. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, 11(1), 103–112.
- Effendy, Onong, U. (2017). *Ilmu Komunikasi Teori dan Praktek*. In *Ilu Komunikasi Teori dan Praktek* (28th ed.). PT Remaja Rosdakarya.
- Elygio, L. R. D., Widjanarko, B., & Handayani, N. (2020). Knowledge, Attitudes, And Access To Information Related To The Prevention Practices During The Covid-19 Pandemic (A study to undergraduate students of Public Health Diponegoro University). *Journal of Public Health for Tropical and Coastal Region*, 3(2), 31–39. <https://doi.org/10.14710/jphtcr.v3i2.9500>
- Farooq, A., Laato, S., & Najmul Islam, A. K. M. (2020). Impact of online information on self-isolation intention during the COVID-19 Pandemic: Cross-Sectional study. *Journal of Medical Internet Research*, 22(5), 1–15. <https://doi.org/10.2196/19128>
- George, D. R., Rovniak, L. S., & Kraschnewski, J. L. (2013). Dangers and opportunities for social media in medicine. *Clinical Obstetrics and Gynecology*. <https://doi.org/10.1097/GRF.0b013e318297dc38>
- Global Digital Repots. (2021). Digital 2021 Indonesia. *Global Digital Repots*. <https://datareportal.com/reports/digital-2020-indonesia>
- Gugus Tugas Percepatan COVID-19. (2021). *Situasi Covid di Indonesia*. <https://covid19.go.id/>
- Han, X., Wang, J., Zhang, M., & Wang, X. (2020). Using social media to mine and analyze public opinion related to COVID-19 in China. *International Journal of Environmental Research and Public Health*, 17(8). <https://doi.org/10.3390/ijerph17082788>
- Handayani, D., Hadi, D. R., Isbaniah, F., Burhan, E., & Agustin, H. (2020). Penyakit Virus Corona 2019. *Jurnal Respiriologi Indonesia*.
- Herman, P. F. (2021). Pengembangan Media Video Pencegahan Covid-19 di Kabupaten Pamekasan Menggunakan Teori P-Process. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, 11(April), 5–6.
- Karman. (2013). Riset Penggunaan Media dan Perkembangannya Kini - Researches on Media Uses And Its Development. *Jurnal Studi Komunikasi Dan Media*, 17(1), 103–121.
- Kaya, T. (2020). The changes in the effects of social media use of Cypriots due to COVID-19 pandemic. *Technology in Society*, 63(April), 101380. <https://doi.org/10.1016/j.techsoc.2020.101380>
- Kementrian Perlindungan Perempuan dan Anak, & Statistik, B. P. (2018). *Profil Generasi Milenial Indonesia*. Kementerian Pemberdayaan Perempuan dan Perlindungan Anak.
- Moudy, Jesica ; Syakurah, R. A. (2020). Pengetahuan terkait Usaha Pencegahan Coronavirus Disease (Covid-19) di Indonesia. *Higeia Journal of Public Health Research and Development*, 1(3), 84–94. <https://doi.org/10.1371/journal.pntd.0008700>
- Notoatmodjo, S. (2014a). *Ilmu Perilaku Kesehatan* (2nd ed.). Rineka Cipta.
- Notoatmodjo, S. (2014b). *Promosi Kesehatan Dan Perilaku Kesehatan*. PT Rineka Citra.
- Pemerintah Kota Semarang. (2021). *Informasi Coronavirus (COVID-19) Semarang*. <https://siagacoronasemarangkota.go.id/halaman/covid19>
- Ramadhan, H. W., & Giyarsih, S. R. (2017). Hubungan Media Sosial Dengan Persepsi Remaja Tentang Kesehatan Reproduksi Menurut Wilayah Perkotaan Dan Perdesaan Di Yogyakarta. *Jurnal Bumi Indonesia*, 6(3), 1–13.
- Rulli, N. (2015). *Media Sosial; Perspektif Komunikasi, Budaya, dan Sioteknologi*. Simbiosis Rekatama Media.
- Sabarudin, Mahmudah, R., Ruslin, Aba, L., Nggawu, L. O., Syahbudin, Nirmala, F., Saputri, A. I., & Hasyim, M. S. (2020). Efektivitas Pemberian Edukasi secara Online melalui Media Video dan Leaflet terhadap Tingkat Pengetahuan Pencegahan Covid-19 di Kota Baubau. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 6(2), 309–318. <https://doi.org/10.22487/j24428744.2020.v6.i2.15253>
- Sari, N. I., Jumakil, & Fithria. (2020). Hubungan Sosio Demografi dan Akses Media Sosial dengan Pengetahuan Pencegahan COVID-19 pada Masyarakat Pesisir Kecamatan Wawolesea Tahun 2020. *Endemis Journal*, 2(3), 21–26.
- Silalahi, C. (2013). Hubungan antara Pengetahuan dan Sikap Perawat tentang HIV/AIDS dengan Tindakan Perawat terhadap Penderita HIV/AIDS di Rumah Sakit Pancaran Kasih

- Manado. *Media Kesehatan FKM UNSRAT*, 46, 1–5.
- Syaipudin, L. (2020). Peran Komunikasi Massa Di Tengah Pandemi Covid-19. *Kalijaga*, 2(1), 14–34.
- Tanggap COVID-19 Provinsi Jawa Tengah,. (2021). *Statistik Kasus COVID-19 Jawa Tengah*. <https://covid19.go.id/peta-sebaran-covid1>
- Wei, Z., Qingpu, Z., Wei, S., & Lei, W. (2012). Role of social media in knowledge management during natural disaster management. *Advances in Information Sciences and Service Sciences*, 4(4), 284–292. <https://doi.org/10.4156/AISS.vol4.issue4.34>
- Yanti, B., Mulyadi, E., Wahiduddin, Novika, R. G. H., Arina, Y. M. D., Martani, N. S., & Nawan. (2020). Community Knowledge , Attitudes , and Behavior Towards Social Distancing Policy As A Means of Preventing Transmission of Covid-19 In Indonesia. *Jurnal Administrasi Kesehatan Indonesia*. 8(1), 4-14. <https://doi.org/10.20473/jaki.v8i2.2020.4-14>
- Yuniarto, D., Khozinaturrohmah, H. N., & Abd. Rahman, A. B. (2021). Effectiveness of Covid-19 Information through Social Media based on Public Intention. *Applied Information System and Management (AISM)*, 4(1), 37–44. <https://doi.org/10.15408/aism.v4i1.19457>