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### KNOWLEDGE, ATTITUDES AND PRACTICES RELATED TO PREVENTING THE TRANSMISSION OF COVID 19 AMONG SOCIAL MEDIA USERS IN INDONESIA

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### ABSTRACT

**Background:** Several countries have implemented health protocols in order to prevent the spread of covid-19. One of the promotional media used by the government is social media. The effectiveness of this prevention is very much dependent on community cooperation. Knowledge, attitudes and practices of the community in preventing Covid 19 have an important role in the new normal era. **Purpose** The purpose of this study is to describe the trust of the Indonesian people to information on the prevention of Covid 19 on social media and public knowledge, attitudes and practices regarding prevention of the spread of COVID-19. Methods This research is a cross sectional online survey. The survey instrument consisted of respondent characteristics consisting of 5 demographic characteristics items and 5 social media use characteristics items, 13 items of trust in social media, 18 items of knowledge, 6 items of attitude and 12 items of practice. The research, which was conducted from 1 September 2020 to 25 September 2020, received 1129 responses. The questionnaire items were modified from the published paper. This research was tested statistically descriptively. Results: Most of the Indonesian people have high trust in Covid 19 prevention information on social media (mean 2.56 and standard deviation 0.55), good knowledge (mean 2.78 with standard deviation 0.60), good affective (mean 2.58 with standard deviation 0.70), good practices (mean 2.42 with a standard deviation of 0.70) regarding Covid-19 prevention. The social media trend chosen by the Indonesian people is Instagram (33.2%) Conclusion. The findings reported in this study are important because they are useful for increasing awareness of institutional and government leaders about the trust in information on social media, knowledge, attitudes, and practices of the prevention of COVID-19 in the Indonesian community.

Keywords: Social media; Trustworthiness; COVID-19; Knowledge; Attitude; Practice

### BACKGROUND

Coronavirus disease 2019 (COVID-19) was first detected in Wuhan, China in

December 2019. On March 11, 2020, The World Health organization (WHO) states that COVID 19 has spread to other countries and has become a global pandemic disease. WHO reports that the number of cases of Covid 19 on August 29, 2020, the number of cases has reached 42,055,863 confirmed positive cases and 1,141,567 cases died (WHO, 2020).

In April 2020, the Government of Indonesia, which has 34 provinces with 267 million inhabitants, declared the Covid 19 pandemic a non-natural national disaster. The Indonesian government has prepared a special task force for covid 19One of the covid 19 task force programs is to create official websites and social media for information specifically for Covid 19. Based on information from the Covid 19 task force website, On August 29, 2020, the number of positive COVID-19 confirmed cases in Indonesia again jumped The total cases increased to sharply. 169,195 cases. The number of Covid 19 patients who died became 7,343 cases and 3,038 new cases emerged. (Satgas Covid -19, 2020).

After the Indonesian government implemented a large-scale health and social restriction protocol or PSBB, the government's next step was to implement a new normal policy as a strategy to prevent the spread of covid 19 (Menteri Kesehatan RI, 2020) . The new normal policy really requires participation from the community. Indonesians are required to get used to implementing health protocols such as wearing masks, washing hands, using cough etiquette, avoiding contact with people affected by Covid 19 and physical distancing (WHO, 2020).

Community participation in spread prevention practice 19 is strongly influenced by their knowledge and positive attitudes (Zhong, Huang and Liu, 2020). Previous research on the knowledge, attitudes and practices of the Indonesian people about social distancing at the time of the emergence of Covid 19 in Indonesia (10-20 March 2020) had good results in

every item (Ti *et al.*, 2020). There is no research yet that examines the knowledge, attitudes and practices of the community in the application of health protocols after the new normal in Indonesia. Moreover, there has been an increase in covid 19 cases again. Success in handling Covid 19 greatly depends on the dissemination of factual information to the public (Chan *et al.*, 2020).

Indonesia, which has more than 300 million cellular subscribers, is the world's largest social media consumer (Balea, 2016). Therefore, it is very easy for the Indonesian people to communicate and write about Covid 19 health problems quickly and freely in social media. This condition has the potential to dynamically change public opinion (Chan *et al.*, 2020). Previous research stated that there were 23% -26% wrong information about Covid 19 in the YouTube Video contents (Li, 2020). Misinformation in society can cause fear and stigma against Covid 19 (Logie and Turan, 2020).

Therefore, social media has tremendous potential that can support or hinder efforts to deal with Covid 19. However, there is no research that describes the trust of the Indonesian people in the information on preventing the spread of Covid 19 on social media along with a description of the knowledge, attitudes and practices of the Indonesian people to prevent Covid 19 when it was new normal.

The purpose of this study is to describe the Indonesian public's trust in information on preventing the spread of Covid 19 and their knowledge, attitudes and practices in prevention when Indonesia implements the new normal policy.The implication of this research is as a reference for government policy making in making health promotion policies for the prevention of covid 19. The results of research in Pakistan reveal that a large scale health promotion is needed to the community to change cognitive attitudes and behavior in preventing the spread of covid-19(Saqlain *et al.*, 2020).

### METHODS

### **Study Design and Participants**

This study used a cross sectional online survey. This study uses a quantitative approach because it fits the research objectives. Survey research design is the most appropriate method to reach a large population of Indonesian society in an effective and efficient manner (Jones, Baxter and Khanduja, 2013). This research was conducted from September 1, 2020 to September 25, 2020. The questionnaire distributed online through the Google platform called Google form. The inclusion criteria of this study were all Indonesian residents, over 18 years old, who actively use social media. Meanwhile, the exclusion criteria of this study were Indonesians who were illiterate and not currently living in Indonesia. This study was carried out according to the STROBE statement. The ethical test of this research obtained from the Faculty of was Medicine, Universitas Andalas with No. 341 / KEP / FK / 2020

### **Data Collection**

This research questionnaire was created to describe the knowledge, attitudes and practices of preventing the spread of Covid 19 among social media users in Indonesia. The questionnaire was modified from previous research (Svare, Haugen Gausdal and Möllering, 2019; Saefi et al., 2020). After being translated into Indonesian, the questionnaire went through the expertise judgment process to 3 experts from Andalas University and a researcher from the Kochi University to provide opinions on the suitability, relevance and clarity of the questionnaire (Rodrigues et al., 2017). The survey data consists of 5 major variables. Characteristics of respondents, the first

survey section, consists of 5 demographic characteristic items and 5 social media use characteristics items. 13 items of trust in social media, 18 items of knowledge, 6 items of attitude and 12 items of practice. Demographic characteristics consist of gender, age, education and occupation. Social media use characteristics items, consisting of the platform type of social media used, frequency of using social media, length of time using social media, types of covid 19 content received, and sources of information about covid 19. The second part, Social media trust items, includes identification, social media efficacy, ability, integrity, Benevolence, and social media concern. The third part, knowledge, includes etiology, signs and symptoms, risk groups, modes of transmission, treatment and measures and and prevention measures for Covid 19. The fourth part, attitudes, covers perceived severity, anxiety and stigma against covid 19. The fifth part questions about preventive practices, including about selfprotection, physical distancing, social protection, nutrition, and patterns of activity and rest.

The participants were guaranteed about the anonymity of their responses. The Participants responses were collected in an Excel file for statistical analysis. A pilot study involving 30 students revealed construct validity test, this instrument variable was retested the construct reliability measured by composite reliability and cronbach's alpha. The following are the results of testing composite reliability and cronbach's alpha from Smart PLS:

Table 1 Composite Reliability an	ıd
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Cronbach Alpa			
	Cronbach's Alpha	Composite Reliability	
Knowledge	0.906	0.928	
Practices	0.909	0.932	

Attitude	0.944		0.964
Level of trust	0.953		0.963
Source: SmartPLS	3.28	output	results
processed by researc	chers		

A construct is declared reliable if it has a composite reliability value above 0.70 and Cronbach's alpha above 0.70. From the SmartPLS output results in the table above, it shows that all constructs have composite reliability values above 0.70 and Cronbach's alpha above 0.70. So, it can be concluded that the construct has good reliability

### **Stastical Analysis**

This research data analysis using descriptive analysis by calculating the frequency and percentage variables. Data collected from the online survey was entered into Microsoft Excel and then imported into the Statistical Package for Social Sciences (SPSS) version 25. The output results are measured as frequency (n) and percentage (%). While the measurement results are expressed as mean and standard deviation (SD). A score was created using the correct answers to the 18 knowledge questions evaluated with 1point, with a range of value from 0 (no knowledge) to 18 (maximum knowledge): we considered for good knowledge a cutoff of correct answers of 75% (14/18).

### RESULTS

### **Respondent Characteristics**

Out of 2500 Indonesians who could participate, only 1129 respondent, respectively, completed the questionnaire (response rate of 45.6% for Indonesian). The majority of respondents were women 825 (73.1%), 545 (48.3%) aged 18-29 years, 385 (34.1%) had bachelor's education qualifications, 610 (54%) were married. 649 (57.5%) respondents also have mental labor type jobs. Other data can be seen in table 2

	(N=1129)		
Characteristic		Ν	(%)
Gender	Male	304	(26.9)
	Female	825	(73.1)
Age	18-29 years old	545	(48.3)
	30-49 years old	486	(43.0)
	$\geq$ 50 years old	98	(8.7)
Marital status	single	519	(46.0)
	married	610	(54.0)
Qualification	Diploma	115	(10.2)
	Barchelor	385	(34.1)
	Master/Ph.D	344	(30.5)
	Senior High School	281	(24.9)
	Junior High School	4	(0.4)
Occupation	mentallabor	649	(57,5)
	students	336	(29,8)
	unemployed	79	(7)
	physicallabor	65	(5,8)

# Table 2 Respondent Characteristics (N=1129)

### Social Media Usage Characteristic

The results of this research survey showed that most respondents 627 (55.5%) used social media more than 6 times a day, 437 (38.7%) used social media for more than 4 hours a day, 668 (59.2%)) use the Instagram platform, and 633 (56.1%) trust the source of information from the Indonesian Ministry of Health. The majority of respondents get information from the type of news content 919 (81.4%), video 845 (74.9%), and articles 809 (71.7%).

(							
<b>Tab</b>	ole 3 Social Me haracteristic(N	edia usa [=1129)	ge		Less than <sup>1</sup> /2 hour	124	11.0
Characteris tic		n	(%)		More than 4 hours	437	38.7
Social media Platform	Instagram	668	59,2	Sources of informatio n covi19	Ministry of Health	633	56,1
	Whattsapp	566	50,1		Friend	129	11,4
	Facebook	408	36,1		Minister of	93	8,2
	Youtube	337	29,8		n and		
	Twitter	157	13,9		Information		
	Telegram	68	6		Family	56	5
	Line	11	1		Detik.com	13	1,2
	Linkedin	1	0,1		Satgascovid19 .com	5	0,4
	Quora	1	0,1		Www.	3	0,3
	Tiktok	1	0,1		Bnpb.go.id		
Frequency	> 6 times per	627	55.5		Kompas.com	3	0,3
social media	uty				Local government website	4	0,4
	2-3 times per day	182	16.1	Content	News	919	81,4
	4-6 times per	257	22.8		Video	845	74,8
	day				Article	809	71,7
	Once a day	61	5.4		Picture	23	2
	Once a week	2	.2		Audio	1	0,1
Length of ti	me using social n	nedia					

1 hour

2-3 hours

232

336

20.5

29.8

### **Trust in Social Media**

Most of the Indonesian people have high trust in Covid 19 prevention information on social media (mean 2.56 and standard deviation 0.55). More than 50% of respondents are

looking for information and tips related to the prevention of Covid 19 and interacting and exchanging opinions with other friends regarding the prevention of Covid 19 transmission. As a result, it can be seen that most, 652 (57.8%), respondents want to follow Covid 19 prevention tips from social media information. The majority of respondents admitted that they were helped by the availability of information on the prevention of Covid 19 on social media. Social media is able to provide new information that is easy, clear, has a positive impact and motivates them to realize the importance of preventing Covid 19. However, 750 (66.4%) of respondents still have doubts about the level of trust in the information on Covid prevention on social media. There are 659 (58.4%) respondents reported more often trusting prevention information from the government. Other data can be seen in table 4.

Question	Often	Sometimes	Novor
Question	(n) %	(n) %	(n) %
Turat in Social Modia	(11) %	(11) %	(11) %
Light fine social Media			
	(20)	460 (41 5	40
Seeking information related to the prevention of covid	620	469 (41,5	40
transmission 19	(54,9%)	<u>%)</u>	(3,5%)
Looking for tips related to the prevention of covid transmission	649	429 (38	51
	(57,5%)	%)	(4,5%)
Interact and exchange opinions with others regarding the	578	469	82
prevention of transmission of covid 19	(51,2%)	(41,5%)	(7,3%)
Social media efficacy			
Follow tips on preventing covid transmission 19	652	447	30
	(57,8%)	(39,6%)	(2,7%)
Ability			
Easy to get information related to the prevention of covid	868	249	12
transmission 19	(76,9%)	(22,1%)	(1,1%)
Get a lot of new information related to preventing the	828	287	14(1,2%)
transmission of covid 19	(73,3%)	(25,4%)	
Get clear information related to preventing the transmission of	558	545	26
covid 19	(49,4%)	(48,3%)	(2,3%)
More confident in preventing the transmission of covid 19	559	525	45 (4%)
1 0	(49,5%)	(46,5%)	~ /
Integrity		,	
Believe in information on preventing the transmission of covid	345	750	34 (3%)
19	(30,6%)	(66,4%)	~ /
Do you believe social media sourced from the government about	659	418 (37%)	52
preventing the transmission of covid 19?	(58,4%)		(4,6%)
Benevolence			
Feel the positive impact of social media in increasing knowledge	739	366	24
regarding the prevention of covid transmission 19	(65.5%)	(32,4%)	(2.1%)
It was helped by the existence of social media because social	846	265	24
media made it easier and provided instructions for me in carrying	(74.9%)	(23.5%)	(1.6%)
out the prevention of covid 19 transmission	(	(,-,-,	(-,-,-)
Concern			
Realize the importance of implementing prevention of covid	846	291	15
transmission 19	(72.9%)	(25.8%)	(1.3%)
	(12,770)	(23,070)	(1,570)

 Table 4 Trust in Social Media (N=1129)

### Knowledge

On average, respondents have good knowledge (mean 2.78 with standard deviation 0.60). Almost all (more than 90%) of respondents know the etiology, signs of symptoms, risk groups and measures to prevent Covid 19. Almost all respondents (more than 90%) were able to answer correctly about the mode of transmission of Covid 19, especially transmission of Covid 19 through respiratory droplets of infected people and can affect small children and adolescents. Two-thirds of respondents gave the correct answer regarding the presence of covid19 transmission through the air, could show covid infection without, the bodies of

people with COVID-19 who have not been buried can be a source of the spread of the COVID-19 virus but there is no potential for transmission to those who have been buried.

From this research, it is also an indication that there is a respondent's misunderstanding of the mode of transmission of Covid 19, especially about immunity and the effectiveness of cloth masks. There are 370 (32.8%) respondents who think that people who have high immunity cannot be infected with COVID-19. 378 (33.5%) of the respondents answered incorrectly and 124 (11%) answered that they did not know that covid-19 could penetrate cloth masks. Other data can be seen in table 5

**Table 5** Knowledge about preventing in covid 19 (N=1129)

Question	Right	Don't know	Wrong
	(n) %	(n) %	(n) %
Knowledge			
Etiology			
COVID-19 is a disease caused by the corona virus	1113 (98,6%)	7 (0,6%)	9 (0,8%)
Sign and Symptom			
The main clinical symptoms of COVID-19 are fever,	1056 (92,6%)	15 (1,3%)	68 (0,8%)
fatigue, cough and muscle aches			
There are also people with COVID-19 who do not	1088 (96,4%)	15 (1,3%)	26 (2,3%)
show any symptoms, which is called positive			
confirmation without symptoms			
Risk Group			
Older people with COVID-19 are more likely to have	1097 (97,2%)	18 (1,6%)	14 (1,2%)
more severe conditions than others			
People with COVID-19 who have chronic diseases	1069 (94,7%)	34 (3%)	26 (2,3%)
such as diabetes, heart disease and obesity have more			
severe conditions than others			
Mode of Transmission			
Children and adolescents do not need to make efforts to			
prevent COVID-19 infection because they have good	1034 (91,6%)	20 (1,8%)	75 (6,6%)
immunity			
People who have high immunity cannot be infected	707 (62 6%)	52 (4.6%)	370 (32.8%)
with COVID-19	707 (02,070)	52 (4,070)	570 (52,670)
People with COVID-19 who don't show symptoms	916 (81 1%)	33(2.9%)	180 15 9%)
cannot pass the virus infection to others	910 (01,170)	33 (2,970)	100 13,970)
COVID-19 spreads through the respiratory droplets of	1025 (90.8%)	29 (2.6%)	75 (66%)
an infected person	1025 (90.070)	2) (2,070)	75 (0,0 %)
The bodies of people with COVID-19 who have not yet			
been buried can be a source of the spread of the	894 (79,2%)	87 (7,7%)	148 (13,1%)
COVID-19 virus			
The buried bodies of people with COVID-19 can be a	879 (77 9%)	123 (10.9%)	127 (11.2%)
source of the spread of the COVID-19 virus	017 (11,270)	123 (10,770)	127 (11,270)

COVID-19 cannot penetrate the cloth masks commonly used by the general public	627 (55,5%)	124 (11%)	378 (33,5%)
COVID-19 only spreads through objects, not through the air	813 (72%)	77 (6,8%)	239 (21,2%)
Treatment			
There is no effective cure for COVID-19, but early symptom treatment and intensive care can help people with COVID-19 recover	1044 (92,5%)	54 (4,8%)	31 (2,7%)
Preventive			
To prevent COVID-19 infection, we must avoid traveling to crowded places such as markets and tourist attractions and avoid using public transportation	1099 (97,3%)	14 (1,2%)	16 (1,4%)
Not traveling between cities can prevent the spread of COVID-19	1075 (95,2%)	15 (1,3%)	39 (3,5%)
One of the ways to prevent the transmission of the COVID-19 virus is by not touching your face	1040 (92,1%)	33 (2,9%)	56 (5%)
Isolation and treatment of people infected with the COVID-19 virus is an effective way to reduce the spread of the virus	1104 (97,8%)	14 (1,2%)	11 (1%)

### Attitudes

The majority of respondents have a positive attitude towards preventing Covid 19 (mean 2.58 with standard deviation 0.70). Attitude analysis covering perceptions of severity, fear and stigma is in the table. Almost all respondents (more than 90%) take it seriously and feel it is important to seek health information and self-isolation for the prevention of covid 19. 1074 (95.1%) respondents also disagreed with people giving negative

stigma in society. However, there are 315 (27%) respondents who blame Covid patients because these respondents All people with COVID-19 are people who violate the government's appeal. In addition, 553 (49%) of respondents admitted to feeling worried or afraid after knowing the development of information on the number of COVID 19 cases on social media. Other data can be seen in table 6

Question	Agree	Not Sure	Disagree
	(n) %	(n) %	(n) %
Attitudes			
Perceived severity			
Keeping up with the development of information about the number of COVID-19 cases is important for the community	1045 (92,6%)	77 (6,8%)	7 (0,6%)
Keeping up with the development of information about the government's appeal on efforts to prevent COVID-19 is important for the community	1098 (97,3%)	27 (2,4%)	4 (0,4%)
People with COVID-19 who are self-isolating means that they have shown their responsibility in preventing transmission of COVID-19	1112 (98,5%)	17 (1,5%)	0 (0%)
Anxiety			
After knowing the development of information about the number of COVID-19 cases I was worried / scared	553 (49%)	451 (39,9%)	125 (11,1%)

**Table 6.** Attitudes about preventing in covid 19 (N=1129)

Stigma			
All people with COVID-19 are people who violate the government's appeal in efforts to prevent the transmission of COVID-19	315 (27,9%)	588 (52,1%)	226 (20%)
People with COVID-19 should not be given a negative stigma in society	1074 (95,1%)	27 (2,4%)	28 (2,5%)

### Practices

Covid-19 prevention practices have a good average (mean 2.42 with a standard deviation of 0.70). More than threequarters of respondents reported always wearing masks, washing their hands with soap, and keeping their homes cleaner. Two-thirds of respondents also admitted to always using a hand sanitizer when traveling to crowded places and always keeping their distance when in crowded places. However, there are some concerns about social protection, nutrition and activity and rest patterns. 355 (31.4%) respondents admitted that they sometimes change their clothes after traveling and contact family members. For nutrition, 576 (51%) respondents reported that they only occasionally consume vitamins to increase endurance. even 120 (10.6%) respondents admitted that they never took vitamins. Most of the respondents, 775 (68.6%), admitted that they sometimes exercise. There are 81 (7.2%) respondents who said they never exercise. almost half of the respondents admitted that they sometimes get enough sleep. Other data can be seen in table 7

**Table 7.** Practices about preventing in covid 19 (N=1129)

Question	Always	Sometimes	Never
	(n) %	(n) %	(n) %
Practices			
Self protection			
Wear a mask when going to crowded places	1095 (97%)	30 (2,7%)	4 (0,4%)
Use the handsanitizer when traveling to crowded	828 (73,3%)	277 (24,5%)	24 (2,1%)
I wash my hands with soap after traveling to crowded places	977 (86,5%)	146 (12,9%)	6 (0,5%)
I keep more and cleaner the place where I live	964 (85,4%)	161 (14, 3%)	4 (0,4%)
I am increasingly diligent in washing my hands using soap	1017 (90,1%)	109 (9,7%)	3 (0,3%)
Physical distancing			
I keep my distance or physical distancing when in a crowd	926 (82%)	197 (17,4%)	6 (0,4%)
Social protection			
I immediately changed the clothes I wore before entering the house and made contact with family members	733 (64,9%)	355 (31,4%)	41 (3,6%)
I educate people around me with knowledge about COVID-19 and its prevention efforts	643 (57%)	455 (40,3%)	31 (2,7 %)
Nutrition			
Eat vegetables and fruit	754 (66,8%)	372 (32,9%)	3 (0,3%)
Take vitamins or supplements to increase endurance	433 (38,4%)	576 (51%)	120 (10,6%)
Activity and rest patterns			
Get enough sleep rest	676 (59,9%)	444 (39,3%)	9 (0,8^)
I am diligent in exercising	273 (24,2%	775 (68,6%)	81 (7,2%)

### DISCUSSION

The COVID 19 outbreak from the city of Wuhan in December 2019 has spread rapidly throughout the world. This outbreak is one of the largest outbreaks in the world and is a challenge to public health (WHO, 2020). The total number of positive cases of COVID-19 in Indonesia has exceeded 470 thousand, with the death of more than 15,000 people, the highest figure in Southeast Asia. At the global level, COVID-19 has reached 55 million cases, with 1.3 million deaths.There is no sign that the virus will be brought under control in Indonesia soon (Task Force COVID-19, 2020).

This study aims to describe the characteristics of the use of social media that Indonesians use in finding information about Covid 19 and their level of trust in social media. In addition, this study also examines the knowledge, attitudes and practices of the Indonesian people towards the prevention of Covid 19 during the new normal and there has been a sharp increase in new cases in the new normal condition. In our research findings, Instagram is the social media platform most often used to get Covid 19 information. This is in accordance with the results of research by previous researchers who suggested Instagram as a health promotion tool (Marcon, Bieber and Azad, 2019; Hussain, Bhowmik and Moreira, 2020). Instagram is a photo sharing social media that allows users to take photos and edit them with several features. As of June 2018. Instagram reported that they have as many as 500 million daily active users in the world. As of October 2020, Indonesia has 78 million active Instagram users (Xie, Tan and Li, 2020).

The majority of respondents in this study were aged 18 to 29 years (48.3%) and had an average level of social media confidence (mean 2.56 and standard deviation 0.55), good knowledge (mean 2.78 with standard deviation 0.60), good affective (mean 2.58 with standard deviation 0.70), good behavior (mean 2.42 a standard deviation of 0.70) with regarding Covid-19 prevention. Several studies have shown that young adults turn to social media more in seeking health information (Swist et al., 2015). Other research also shows that other benefits of social media are increased exchange of health information. access to health information and social and group emotional support for health problems experienced (Shaw et al., 2015).

Based on data on demographic characteristics of social media use, we conclude that although respondents are exposed to a lot of information through social media, as indicated by the majority of respondents, the frequency is more than 6 times a day and social media use is more than 4 hours a day, but most of the respondents, (56, 1%) can choose the right source of information, namely through the Indonesian Ministry of Health as the main reference. Research that examines social media efficacy shows that reading behavior seeing other people's commentary articles or videos can contribute to increasing selfconfidence to do tips on these social media (Page Hocevar, Flanagin and Metzger, 2014).

Even though Social Media has more positive impacts on health promotion media, the government is also expected to provide support and provision to the public to be critical of Covid 19 prevention information on social media. For example in this study, some respondents still think that people who have high immunity or use cloth masks are enough to prevent them from contracting covid infection 19. Recommendations from other studies also mention that social media used for health education requires collaboration with government and technology companies, for example the WhatsApp company which has launched a joint chat box to check international facts to avoid misinformation (Gupta, 2020). In addition, the use of open access for academic journals is very helpful in identifying misinformation in social media related to Covid 19 (Broniatowski *et al.*, 2020).

One important thing to discuss is the reporting of respondents' feelings of anxiety when they get information about the number of Covid 19 cases on social media as well as the stigma against all covid patients who are deemed guilty of not adhering to health protocols (Wang et Negative emotions such as al., 2020). anxiety and fear are defensive reactions as a result of the threat of contracting or transmitting disease (Bavel, 2020). A study meta-analysis states that health on promotion messages that generate feelings of fear and anxiety will be effective when accompanied by self-efficacy or the ability to overcome threats that come. If not, then the behavior that appears leads to defensive reactions when they feel powerless to act (Witte and Allen, 2000).

The stigma against COVID-19 is caused by the high fear of death and transmission (Abdelhafiz *et al.*, 2020). This problem can be overcome through proper health education and transparency of health care policies. Research from China also reports that fear of stigma or discrimination against Covid patients can lead to misinformation (Lin *et al.*, 2020).

From this research data, it is found that the practice of preventing Covid-19 is good, but it needs support and motivation and the government to increase consumption of vegetables and fruits and vitamins. If people are diligent in consuming vitamin D, it can even reduce the risk of covid infection 19 (Grant *et al.*, 2020).

Besides that, the government also needs to increase health promotion so that people are more active in exercising and have adequate sleep rest to increase immunity. The results of the Mckinsey survey show that during the pandemic, most Indonesians spend more time watching television, consuming online and using social media news, (McKinsey&Company, 2020).Distance learning users such as, Moodle and Google Classrooms also increased by 39%. The use of home entertainment facilities in the form of online games, tick-tock and watching e-sports increased by 32%, 15% and 28% (McKinsey&Company, 2020).

From this data, we can see that the COVID-19 pandemic has triggered an in sedentary lifestyles increase in Indonesian society . A study by the University of Missouri stated that sitting for 6 hours or more can lower immunity and aggravate chronic illness. Patients who are positive for the coronavirus (COVID-19) can have severe and aggravating symptoms if they also experience chronic illness (Thorp et al., 2011; Dunstan et al., 2012)

Therefore, the findings in this study can provide additional evidence that shows social media is very effective for health promotion aimed at young people. Information from government sources can be trusted by the public. The government is expected to continue to increase its health promotion campaign on social media. Research on knowledge, affective and practice states that increasing knowledge is closely related to the art of increasing attitudes and practices to prevent Covid 19 (Zhong et al., 2020). The Indonesian government can work with all parties such as content creators or influencers to create content, be it articles, videos or interesting news for the public to read.

Future research is expected to contain a complex analysis of the relationship between social media, demographic characters, and how it affects people's attitudes and practices towards Covid 19. In this study, the number of samples of women is more limited than that of men. Future studies are expected to have more balanced gender variations. However, the strength of our study is that most of the respondents after young adults have a bachelor's degree so that credibility in answering the questionnaire can be trusted.

### CONCLUSION

Social media can be an effective tool for health promotion to prevent the spread of covid 19. This study aims to provide a comprehensive assessment of public trust in the knowledge, attitudes and practices of preventing Covid 19 during the new normal in Indonesia. The findings suggest that Indonesians who participated in this study have Indonesian people have a high level of trust in social media, good knowledge, affective and knowledge about the prevention of covid 19. But in this new normal there needs to be guidance and control from the government in promoting covid 19 health. The community has the right knowledge and attitude towards preventing covid 19. The government also needs to intensify health promotion on social media regarding the importance of choosing good nutrition and exercise and adequate rest by collaborating with related parties.

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### REFERENCES

Abdelhafiz, A. S. et al. (2020)'Knowledge, perceptions, and attitude egyptians towards the of novel coronavirus disease (COVID-19)', Journal of Community .... Springer. Available at: https://link.springer.com/content/pdf/10 .1007/s10900-020-00827-7.pdf.

- Balea, J. (2016) Indonesia: web and mobile data for 2016 (INFOGRAPHIC), Tech In Asia. Available at: https://www.techinasia.com/indonesiaweb-mobile-statistics-we-are-social (Accessed: 25 October 2020).
- Basch, C. H., Hillyer, G. C. and Jaime, C. (2020) 'COVID-19 on TikTok: harnessing an emerging social media platform to convey important public health messages.', *International journal of adolescent medicine and health*. De Gruyter. doi: 10.1515/IJAMH-2020-0111.
- Bavel, J. J. V (2020) 'Using social and behavioural science to support COVID-19 pandemic response', *Nature Human Behaviour*, pp. 460–471. doi: 10.1038/s41562-020-0884-z.
- Broniatowski, D. A. *et al.* (2020) 'The COVID-19 Social Media Infodemic Reflects Uncertainty and State-Sponsored Propaganda.', *arXiv: Social and Information Networks*. Available at: http://ui.adsabs.harvard.edu/abs/2020ar Xiv200709682B/abstract.
- Chan, A. K. M. *et al.* (2020) 'Social media for rapid knowledge dissemination: early experience from the COVID-19 pandemic', *Anaesthesia.* ncbi.nlm.nih.gov. Available at: https://www.ncbi.nlm.nih.gov/pmc/arti cles/pmc7228334/.
- Dunstan, D. W. *et al.* (2012) 'Breaking up prolonged sitting reduces postprandial glucose and insulin responses', *Diabetes Care.* Diabetes Care, 35(5), pp. 976–983. doi: 10.2337/dc11-1931.
- Grant, W. B. *et al.* (2020) 'Evidence that
  Vitamin D Supplementation Could
  Reduce Risk of Influenza and COVID19 Infections and Deaths', *Nutrients*.
  MDPI AG, 12(4), p. 988. doi:
  10.3390/nu12040988.
- Gupta, L. (2020) 'Information and misinformation on COVID-19: A cross-

sectional survey study', *Journal of Korean Medical Science*, 35(27). doi: 10.3346/JKMS.2020.35.E256.

- Hussain, A., Bhowmik, B. and Moreira, N.
  C. do V. (2020) 'COVID-19 and diabetes: Knowledge in progress', *Diabetes Research and Clinical Practice*. Elsevier BV, p. 108142. doi: 10.1016/j.diabres.2020.108142.
- Jones, T. L., Baxter, M. and Khanduja, V. (2013) 'A quick guide to survey research', *Annals of the Royal College of Surgeons of England*. Royal College of Surgeons of England, 95(1), pp. 5–7. doi:

10.1308/003588413X13511609956372

- Li, H. O. Y. (2020) 'YouTube as a source of information on COVID-19: A pandemic of misinformation?', *BMJ Global Health*, 5(5). doi: 10.1136/bmjgh-2020-002604.
- Lin, Y. et al. (2020) 'Influence of Mass and Social Media on Psychobehavioral Responses Among Medical Students During the Downward Trend of COVID-19 in Fujian, China: Cross-Sectional Study.', Journal of Medical Internet Research. JMIR Publications Inc. doi: 10.2196/19982.
- Logie, C. H. and Turan, J. M. (2020) 'How do we balance tensions between COVID-19 public health responses and stigma mitigation? Learning from HIV research', *AIDS and Behavior*. Springer. Available at: https://link.springer.com/article/10.100

7/s10461-020-02856-

8?fbclid=IwAR2SYoWp6hkOLKjguh-OViyWYhvyEo3yXHTH86ueQ9FTD8 1X53iDr4DToNY&error=cookies\_not \_supported&code=6b850d0e-0482-4da1-8027-fd14216e0749.

Marcon, A. R., Bieber, M. and Azad, M. B. (2019) 'Protecting, promoting, and supporting breastfeeding on Instagram', *Maternal and Child Nutrition*. Blackwell Publishing Ltd, 15(1). doi: 10.1111/mcn.12658.

- McKinsey&Company (2020)'Global surveys of consumer sentiment during the coronavirus crisis | Marketing & Sales McKinsey & Company', Mckinsey. Available at: https://www.mckinsey.com/businessfunctions/marketing-and-sales/ourinsights/survey-indonesian-consumersentiment-during-the-coronaviruscrisis# (Accessed: 31 October 2020).
- Menteri Kesehatan RI (2020) Keputusan Menteri Kesehatan Republik Indonesia Nomor, PROTOKOL KESEHATAN BAGI MASYARAKAT. Available at: http://www.albayan.ae (Accessed: 31 October 2020).
- Page Hocevar, K., Flanagin, A. J. and Metzger, M. J. (2014) 'Social media self-efficacy and information evaluation online', *Computers in Human Behavior*, 39, pp. 254–262. doi: 10.1016/j.chb.2014.07.020.
- Saefi, M. et al. (2020) 'Survey data of COVID-19-related knowledge, attitude, and practices among indonesian undergraduate students', *Data in Brief*. Elsevier Inc., 31, p. 105855. doi: 10.1016/j.dib.2020.105855.
- Saglain, M. et al. (2020) 'Knowledge, attitude, practice and perceived barriers professionals healthcare among regarding COVID-19: Α Crosssectional survey from Pakistan', The Journal of .... ncbi.nlm.nih.gov. Available at: https://www.ncbi.nlm.nih.gov/pmc/arti cles/PMC7211584/.
- Satgas Covid -19 (2020) *Beranda Satgas Penanganan COVID-19, Satgas Covid -19.* Available at: https://covid19.go.id/ (Accessed: 31 October 2020).
- Shaw, J. M. *et al.* (2015) 'Social media used as a health intervention in adolescent health: A systematic review of the literature', *DIGITAL HEALTH*.

SAGE Publications, 1, p. 205520761558839. doi: 10.1177/2055207615588395.

- Svare, H., Haugen Gausdal, A. and Möllering, G. (2019) 'The function of ability, benevolence, and integritybased trust in innovation networks'. doi: 10.1080/13662716.2019.1632695.
- Swist, T. et al. (2015) Social media and the wellbeing of children and young people: A literature review. Available at: https://researchdirect.westernsydney.ed u.au/islandora/object/uws%3A36407/ (Accessed: 31 October 2020).
- Task Force COVID-19 (2020) 'Peta Sebaran | Satgas Penanganan COVID-19', *Satgas Penanganan COVID-19*. Available at: https://covid19.go.id/petasebaran (Accessed: 22 November 2020).
- Thorp, A. A. *et al.* (2011) 'Sedentary behaviors and subsequent health outcomes in adults: A systematic review of longitudinal studies, 19962011', *American Journal of Preventive Medicine*. Elsevier Inc., 41(2), pp. 207– 215. doi: 10.1016/j.amepre.2011.05.004.
- Ti, B. et al. (2020) 'COMMUNITY KNOWLEDGE, ATTITUDES, AND BEHAVIOR TOWARDS SOCIAL DISTANCING POLICY AS PREVENTION TRANSMISSION OF COVID-19 IN INDONESIA', Jurnal Administrasi Kesehatan Indonesia. 8(2), 4. doi: p. 10.20473/jaki.v8i2.2020.4-14.
- Wang, C. *et al.* (2020) 'Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population

in China', International Journal of Environmental Research and Public Health, 17(5). doi: 10.3390/ijerph17051729.

- WHO (2020) WHO Indonesia Situation Report-11 who.int/indonesia Situation Report-7 INDONESIA Situation Report 19. Available at: https://infeksiemerging.kemkes.go.id/ (Accessed: 31 October 2020).
- Witte, K. and Allen, M. (2000) 'A metaanalysis of fear appeals: Implications for effective public health campaigns', *Health Education and Behavior*. SAGE Publications Inc., 27(5), pp. 591–615. doi: 10.1177/109019810002700506.
- Xie, T., Tan, T. and Li, J. (2020) 'An extensive search trends-based analysis of public attention on social media in the early outbreak of covid-19 in china', *Risk Management and Healthcare Policy*. Dove Press, pp. 1353–1364. doi: 10.2147/RMHP.S257473.
- Zhong, B., Huang, Y. and Liu, Q. (2020) 'Mental health toll from the coronavirus: Social media usage reveals Wuhan residents' depression and secondary trauma in the COVID-19 outbreak'. in *Computers* human behavior. Elsevier. Available at: https://www.sciencedirect.com/science/ article/pii/S0747563220302764.
- Zhong, B. L. *et al.* (2020) 'Knowledge, attitudes, and practices towards COVID-19 among chinese residents during the rapid rise period of the COVID-19 outbreak: A quick online cross-sectional survey', *International Journal of Biological Sciences*, 16(10), pp. 1745–1752. doi: 10.7150/ijbs.45221.