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The Responses of Healthcare Professionals and the Media to the Emergency Mobile Restriction Policies on Social Media

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ABSTRACT

Health workers play a vital role during the COVID-19 pandemic, not only in the health facilities but also as a reference in the media. This role arises from the health workers' accounts on social media amplified by the mass media and public discourse. This study aims to examine the narratives of doctors' accounts on social media, responding to the emergency period of the Covid-19 pandemic in Indonesia. This study maps and analyzes the narratives of the 10 (ten) doctors' Twitter accounts in Indonesia during the Emergency Community Activity Restrictions (PPKM) period from 3 July - 23 August 2021 through qualitative content analysis methods. The spread of the Delta variant virus and a significant increase in active cases, death, and bed occupancy rates were recorded during this period. The study shows that each doctor has a different narrative, with the main issues: vaccination, health protocols, health facilities, case data, and government policies related to the pandemic. Some doctors' narratives are also a form of public pressure on government policies. This study also notes the phenomenon of "twitting to the press" by the mass media because of social restriction.

Keywords: *Healthcare professional, Twitter, mobility restriction, Covid-19, Indonesia*

ABSTRAK

Tenaga kesehatan memiliki peran penting selama masa pandemi COVID-19. Tak hanya menjadi garda depan dalam memutus mata rantai penyebaran virus, namun juga menjadi rujukan informasi bagi masyarakat melalui kemunculannya di media. Peran ini muncul dari keaktifan tenaga medis di media sosial yang diamplifikasi oleh media massa dan kemudian menjadi wacana publik. Tujuan penelitian ini adalah melihat narasi para dokter di sosial media, menyikapi masa darurat pandemic Covid-19 di Indonesia. Penelitian ini memetakan dan menganalisis narasi 10 akun Twitter dokter terpopuler di Indonesia selama periode Pemberlakuan Pembatasan Kegiatan Masyarakat (PPKM) Darurat dari 3 Juli - 23 Agustus 2021 melalui metode analisis isi kualitatif. Periode ini ditandai persebaran virus varian Delta dan kenaikan signifikan jumlah kasus aktif, angka kematian, dan tingkat keterisian tenpat tidur. Hasil penelitian menunjukkan setiap dokter memiliki narasi yang berbeda dalam merespons kebijakan penanganan COVID-19 di media sosial, dengan isu utama meliputi vaksinasi, penerapan protokol kesehatan, fasilitas kesehatan, data kasus, serta pejabat dan kebijakan pemerintah terkait pandemi. Narasi para dokter juga menjadi bentuk tekanan publik kepada kebijakan pemerintah pemerintah. Selain itu, penelitian ini juga mencatat adanya fenomena penerapan twitting to the press oleh media massa sebagai imbas penerapan kebijakan pembatasan sosial.

Kata Kunci: Tenaga kesehatan, Twitter, pembatasan mobilitas, Covid-19, Indonesia

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INTRODUCTION

Covid-19 was identified in Indonesia in early March 2020. Various strategies and policies were taken to respond to the pandemic. The health authority conveys health protocol campaigns such as social distancing, washing hands, and wearing masks (3M) (Rumiati et al., 2021), also fighting against hoaxes and misinformation (Susilo et al., 2021). The campaigns are published at diverse promotions (D. P. Sari et al., 2021) with their penalties (Putri, 2021) although the study stated it is quite late in that period (Sirait & Sanjaya, 2021). It is not only conveyed by the related institutions, but also by the public figures and healthcare professionals. This study will specifically portray covid-19 information by doctors on Twitter. The follower numbers and the verified account status are the main indicators to select the doctors' accounts in this study.

Soon after the pandemic was declared in Indonesia, the Government regulated the mobility restriction in several cities by April 2020 (Ariawan & Jusril, 2020; Satyakti, 2020). With this regulation, the role of the internet, and specifically, social media has become more central in obtaining information. Today, with social media, information becomes easily, quickly, and widely spread (Nasrullah, 2015). This speed brings the concerns and panic about Covid-19 more pronounced (Rudianto et. al., 2020). If it is shared with a lack of accuracy, then will trigger a bunch of new problems (Vraga et al., 2020). Misinformation and fake news are also easy to be shared. Its spread tends to be massive and much faster than in conventional media such as newspapers (B. Desai, 2021; Zarocostas, 2020).

Social media penetrate the generations of new media users, ranges from 20-40 years old (We Are Social, 2021). More than 4.2 trillion users (Kemp, 2021), 170 billion were Indonesian (We Are Social, 2021). With this huge global number of users, it is not surprising that the penetration of COVID-19 information on social media is significant, both information and disinformation (Jurkowitz, Mark; Mitchell, 2020). Social media proven to be the medium for sharing and finding awareness during this outbreak (Saud et al., 2020). People also use social media to critisize the government response to the pandemic (Wijaya & Ida, 2021).

Communication failures can worsen the situation in terms of handling the Covid-19 pandemic (Hatcher, 2020). For instance, the absence of exemplary from the public figures, has proven to be one of the factors why people ignore health protocols in Indonesia (R. K. Sari, 2021). Other factors include the difficulty understanding the information provided by the government, the difficulty in accessing information due to inadequate communication equipment, prioritizing economic activities, and distrust of inconsistent government policies and statements (Anggoro Saputro et al., 2020; Novi Afrianti, 2021; R. K. Sari, 2021).

The mobility restriction was also disrupting the way journalist works (Perreault & Perreault, 2021). Their newsroom soon become virtual newsroom (García-Avilés, 2021). Their effort to reverse the misinformation streem meet its challenge. Although in several aspect this profession meets oportunity, data journalism for instance (A. Desai et al., 2021), pandemic re-shape the way they work. Delta variant spread in Indonesia in July 2021 (Dyer, 2021) and forced the Government to declared Emergency Public Activity Restriction. It is break people mobility even more and force the journalists to work fully from home (Abdul Muqsith, 2020).

The existence of doctors in social media give a positive influence (Katz & Nandi, 2021b). The pandemic has made doctors, as health professionals, regain their place and stage in the center of attention (Wallace, 2020). Researchers noted that several doctors actively provided information on social media regarding COVID-19. Twitter supports it by providing verified status (blue ticks) for some of the doctor's accounts. Some of the names: dr. Andi Khomeini Takdir (dr_koko28) Palace vaccinator and active doctor at Wisma Atlet Covid-19 Hospital, Prof. Zubairi Djoerban (@ProfesorZubairi) Internal Medicine Specialist, Hematology-Oncology (Cancer) subspecialist as well as the Chair of the Covid-19 Task Force, the Indonesian Doctors Association (IDI), dr. Gia Pratama (@GiaPratamaMD), dr. Pandu Riono (@drpriono1), dr. Dirga Rambe (@dirgarambe), dr. Adam Brata (@AdamPrabata), dr. Jaka Pradipta (@jcowacko), dr. Berlian Idris (@berlianidris), dr. Tompi (@dr_tompi) dr. Tirta M Hudhi (@tirta_cipeng) and many more.

Figure 1. Dr. Andi Khomaeini Takdir in Twitter

(Source: Twitter.com/dr_koko28)

The presence of doctors and researchers in social media is very much needed, even before the pandemic (Prawiroharjo & Libritany, 2017). Along with the increasing activity of doctors on social media during the pandemic, Indonesia's Honorary Council for Medical Ethics (MKEK) issued ethics on social media activities for the medical profession as MKEK 29/2021. Doctors' and pandemic digital activism accounts have become a policy advocacy medium during the pandemic (Wijaya, 2022). Some of them were invited by the Minister of Health Budi Gunadi Sadikin to discuss, especially at the beginning of his leadership. The main challenge of this research is the lack of previous domestic research related to the narrative of health workers on social media. It is necessary to explore the narrative of the doctors, and how these tweets became a source of news for journalists during the emergency period.

METHOD

This study utilizes a qualitative content analysis method with a constructivist-descriptive approach. This approach focuses on how a particular event is reflected through interaction and language, including in media text narratives (Krippendorf, 2013). Content analysis answers the questions to unpack, explore, deconstruct, or understand related to the research object (Ida, 2014). According to Eriyanto, a descriptive approach aims to describe the aspects or characters of a message or text (Eriyanto, 2011).

The descriptive approach does not aim to find relationships or test hypotheses but rather describes aspects, contexts, or characters of the text. In this study, the texts analyzed are the tweets of ten doctors' Twitter accounts during the Emergency Community Activity Restrictions (PPKM) period from 3 July - 23 August 2021. Primary data was crawled from the 10 (ten) doctor's tweets during the period. Since this study only focuses on narratives inside the tweets, it does not operate social media analytics and its sentiment analytics.

The doctor's accounts were picked as the research object based on the criteria previously determined. These are, (1) working as doctors, (2) actively sharing knowledge and information on Twitter related to the pandemic (especially during Emergency PPKM), (3) verified accounts or at least having followers of more than 10,000, (4) the doctor is also have been by media as a reference as the source of their articles (coined as "twitting the press" by Christina Holtz-Bacha).

Data analysis operates the four-line approach of Miles, Huberman, and Saldana analysis with steps of data collection, data reduction, presentation of basic data, and drawing conclusions and verification (Miles et al., 2014). First, tweets are grouped and organized

into emerging themes. Then categorized and organized into emerging themes and the underlying concepts to be analyzed with the help of NVivo 12 software. The results are then visualized in the form of word cloud diagrams.

RESULTS AND DISCUSSION

This study obtained data from 10 (ten) doctors with the criteria as previously mentioned. Apart from the names listed, there are still many names of doctors who are actively providing information related to the pandemic on social media. However, this study notes that these ten (10) doctors are having more traffic on Twitter and are also quoted more by various media. Besides, the listed doctors have met the criteria mentioned above. The list is as follows:

Table 1. Ten (10) Twitter Accounts of Doctors who are Actively Providing Covid-19 Information during Emergency Public Activity Restriction

No	Name	Username	Follower as Juli 3, 2021	Date of joining Twitter
1	dr Andi Khomeini Takdir	@dr_koko28 ✔	189100	October-18
2	dr Zubairi Djoerban	@ProfesorZubairi	53000	October-20
3	dr Gia Pratama	@GiaPratamaMD ✔	258700	June-12
4	dr Pandu Riono	@drpriono1	27300	August-20
5	dr Dirga Rambe	@dirgarambe ✔	86300	July-09
6	dr Adam Prabata	@AdamPrabata	27000	September-11
7	dr Jaka Pradipta	@jcowacko	53200	July-09
8	dr Tompi	@dr_tompi ✔	1100000	August-09
9	dr berlianidris	@berlianidris	70400	April-09
10	dr Tirta Mandira Hudhi	@tirta_cipeng ✔	407100	February-10

✔ : verified account

Source: Research result (2021)

The Media and the Healthcare Professionals during the Pandemic

WHO stated that there is an excessive flow of information called *infodemic*. It includes hoaxes and misinformation buzzed around us and creates confusion and encourages actions that pose a risk to health (The Lancet Infectious Diseases, 2020). *Infodemic* often pushed

more impact both on public and issued policies deal with the pandemic (Patel et al., 2020). The absence of reference information makes various parties take independent steps that were not entirely based on accurate data. As a result, many actions taken by both local governments and the community tend to be over-reactive, not well-targeted, and even irrelevant to the responses of Covid-19 (Wahyuni & Ambardi, 2020). From March 2020 to mid-2021, the Indonesia government responses regarding the pandemic often ignore the potential risks (Mietzner, 2020).

The pandemic situation addresses the role of healthcare professionals such as doctors, epidemiologists, virologists, immunologists, and public health professionals up to the stage (Gamalliel et al., 2021). Compared to the public officer and politicians who often give ambiguous statements and contradict scientific principles of controlling infectious diseases, healthcare professionals from the beginning have given early warnings of possible outbreaks and suggested handling measures such as restrictions on mobility and regional quarantine (Falcone et al., 2020). It came naturally from their moral commitment as medical personnel (Johnson & Butcher, 2021), to handle the associated risks and the social contract between health professionals and the communities in which they work.

The media then highlight the roles of doctors through their appearance as sources of news, public debates, and various other events. It makes the public trust healthcare professionals more than officials and politicians (Lavazza & Farina, 2020). The CSIS report shows that information from health workers is the most credible information by the public regarding Covid-19 (CSIS, 2021). It shows that the health sector is an area where the public trusts the expertise of healthcare professionals such as doctors for decisions related to individual health and safety (Lavazza & Farina, 2020)

The distribution of credible information through the media plays a significant role in epidemic prevention and effective public health management (Neely et al., 2021). This capacity plays a vital role during the pandemic. They keep spreading valid information and overcoming the infodemic (Tsao et al., 2021). In the Covid-19 pandemic situation, social media provides opportunities for health workers to play a direct role in raising awareness, disseminating information, and building solidarity during the pandemic (Law et al., 2021). While on the public side as users of health care services, social media functions as a complement to health services that are not obtained directly from health workers (Smailhodzic et al., 2016). Social media is also an intermediary that allows the public to access scientific references such as health journals which generally can only be accessed by health workers on a limited basis (Katz & Nandi, 2021a; Rosenberg et al., 2020).

In the context of Covid-19, social media and the information inside are associated with high individual risk perceptions related to preventive actions, beliefs, and acceptance of vaccines (Rivas et al., 2021). This search for information on social media can overcome doubts which able to encourage Covid-19 prevention actions by individuals (Liu, 2020). The easier it is shared, the easier the information is contaminated. It creates information overload that can make individuals depressed and exhausted (Soroya et al., 2021). In addition, the spread of health information through social media potentially causes conflict among health workers and creates confusion for the public (Law et al., 2021). The fact that the stream of information cannot be fully controlled, doctors and health workers must be able to take responsibility for all the information they convey in the media (Carlo et al., 2021). For this reason, doctors must ensure that they are not only a source of information but also a trusted source (Law et al., 2021).

The Narratives

The narrative analysis uses the four-line analysis approach of Miles, Huberman, and Saldana with steps of data collection, data reduction, presentation of basic data, and drawing conclusions and verification (Miles et al., 2014). Data in the form of tweets in each doctor's account (a total of 2,000 tweets with 200 tweets per account during the Emergency Public Activity Restriction period) were grouped and organized into emerging themes and underlying concepts to be analyzed with NVivo 12 software. According to the calculation, there are 15 (fifteen) words that often appear in doctors' tweets, namely "*vaksin*" (vaccine), "*vaksinasi*" (vaccination), "*pasien*" (patient), "*kasus*" (case), "*varian*" (variant), "*kematian*" (death), "*dokter*" (doctor), "*sakit*" (ill), "*virus*" (virus), "delta", "*penduduk*" (population), "*nakes*" (health care workers), "*penelitian*" (research), "*gejala*" (symptoms), and "Jakarta".

Word	Length	Count	Weighted Percentage ⌄
vaksin	6	238	0,68%
vaksinasi	9	163	0,46%
pasien	6	90	0,26%
kasus	5	70	0,20%
varian	6	61	0,17%
kematian	8	58	0,17%
dokter	6	57	0,16%
sakit	5	49	0,14%
virus	5	49	0,14%
delta	5	47	0,13%
penduduk	8	47	0,13%
nakes	5	46	0,13%
penelitian	10	46	0,13%
gejala	6	42	0,12%
jakarta	7	41	0,12%

Figure 2. The dominant Words Used in Doctors' Tweets during Emergency PPKM

Source: Research Result (2021)

Figure 3. Wordcloud in Doctors' Tweets during Emergency PPKM

Source: Research Result (2021)

The words sorted for their relationship with the underlying context through the Nvivo word tree mechanism. From this process, 5 (five) themes emerged in the doctors' tweets along with the frequency of their tweets as follows:

1. Vaccine

Vaccines became the theme with the highest frequency of twits, reaching 282 twits (14.10%) out of a total of 2000 twits. Dirga's account (@dirgarambe) has the most tweets about the vaccine total of 72 tweets (36.00%) out of 200 tweets. Some of the topics that emerged were information on vaccine types and vaccination information and booster policies for health workers.

Table 2. Percentage of Tweets about Vaccines (during Public Activity Restriction)

No	Name	Username	Tweet	Total Tweet	Percentage
1	dr Dirga Rambe	@dirgarambe	72	200	36,00%
2	dr Zubairi Djoerban	@ProfesorZubairi	59	200	29,50%
3	dr Pandu Riono	@drpriono1	57	200	28,50%
4	dr Adam Prabata	@AdamPrabata	36	200	18,00%
5	dr Andi Khomeini Takdir	@dr_koko28	26	200	13,00%
6	dr Jaka Pradipta	@jcowacko	13	200	6,50%
7	dr Gia Pratama	@GiaPratamaMD	12	200	6,00%
8	dr berlianidris	@berlianidris	3	200	1,50%
9	dr Tirta Mandira Hudhi	@tirta_cipeng	3	200	1,50%
10	dr Tompi	@dr_tompi	1	200	0,50%
	TOTAL		282	2000	14,10%

Source: Research Result (2021)

2. Health Protocol

The health protocol issue became the second theme in the range of Emergency Public Activity Restriction by the doctors. Most accounts remind the importance of health protocols and a healthy lifestyle even though people have been vaccinated. The healthcare professionals believe that the first thing people should do during the pandemic is always discipline with the health protocol and guidelines provided. Dr. Pandu Riono put 3M and 3T at the end of

almost all his tweets. He believes that 3M (Washing hands, Physical distancing, and Wearing Mask) and 3T (Testing, Tracking, and Treatment/Isolating) is the fundamental aspect to response to the pandemic. While Prof. Zubairi, remind people not to relax too much although the active case number flatted. The pandemic is far from the end. The vaccination program is also had to run at the same pace.

Table 3. Percentage of Tweets about Health Protocols (during Emergency Public Activity Restriction)

No	Name	Username	Tweet	Total Tweet	Percentage
1	dr Pandu Riono	@drpriono1	40	200	20,00%
2	dr Jaka Pradipta	@jcowacko	36	200	18,00%
3	dr Zubairi Djoerban	@ProfesorZubairi	35	200	17,50%
4	dr Adam Prabata	@AdamPrabata	25	200	12,50%
5	dr Andi Khomeini Takdir	@dr_koko28	25	200	12,50%
6	dr Gia Pratama	@GiaPratamaMD	9	200	4,50%
7	dr Dirga Rambe	@dirgarambe	6	200	3,00%
8	dr Tompi	@dr_tompi	2	200	1,00%
9	dr Tirta Mandira Hudhi	@tirta_cipeng	1	200	0,50%
10	dr berlianidris	@berlianidris	1	200	0,50%
			180	2000	9,00%

Source: Research Result (2021)

3. Health Services

Health facilities and their personnel are the next issues to be discussed. The tweets are also mentioned about the bed occupancy rate (BoR), oxygen supply availability, and pandemic fatigue that happen to the medical personnels.

Table 4. Percentage of Tweets about Health Services (during Public Activity Restriction)

No	Name	Username	Tweet	Total Tweet	Percentage
1	dr Zubairi Djoerban	@ProfesorZubairi	40	200	20,00%
2	dr Jaka Pradipta	@jcowacko	19	200	9,50%
3	dr Dirga Rambe	@dirgarambe	18	200	9,00%
4	dr Gia Pratama	@GiaPratamaMD	14	200	7,00%
5	dr Adam Prabata	@AdamPrabata	13	200	6,50%
6	dr Pandu Riono	@drpriono1	10	200	5,00%
7	dr Andi Khomeini Takdir	@dr_koko28	9	200	4,50%
8	dr Tirta Mandira Hudhi	@tirta_cipeng	1	200	0,50%
9	dr berlianidris	@berlianidris	1	200	0,50%
10	dr Tompi	@dr_tompi	0	200	0,00%
			125	2000	6,25%

Source: Research Result (2021)

4. Public Officials and Public Policy

Doctors are also active in providing suggestions and recommendations to the government. They also critics public officials such as President Mr. Joko Widodo, Vice President Mr. Ma'ruf Amin, Coordinating Minister for Maritime Affairs and Investment Mr. Luhut Binsar Panjaitan, Governor of DKI Jakarta Anies Baswedan, and Minister of Health Budi Gunadi Sadikin, for instance. These criticisms and inputs are related to pandemic handling responses such as data validity, transparency, mobility restrictions, crowd, and health service availability. They also critics the non-pandemic policies such as the removal of critical murals by government officials.

Table 5. Percentage of Tweets about Public Officials and Public Policies (during Emergency Public Activity Restriction)

No	Name	Username	Tweet	Total	Percentage
1	dr Pandu Riono	@drpriono1	54	200	27,00%
2	dr Zubairi Djoerban	@ProfesorZubairi	14	200	7,00%
3	dr Adam Prabata	@AdamPrabata	13	200	6,50%
4	dr Andi Khomeini Takdir	@dr_koko28	9	200	4,50%
5	dr Tirta Mandira Hudhi	@tirta_cipeng	6	200	3,00%
6	dr Jaka Pradipta	@jcowacko	4	200	2,00%
7	dr Gia Pratama	@GiaPratamaMD	4	200	2,00%
8	dr Dirga Rambe	@dirgarambe	3	200	1,50%
9	dr berlianidris	@berlianidris	3	200	1,50%
10	dr Tompi	@dr_tompi	0	200	0,00%
			110	2000	5,50%

Source: Research Result (2021)

A related tweet was coined by dr. Adam. As he does not criticize or suggest the policy, he explained more about it by having a QnA thread. This kind of explanation gained much attention from the public as it was retweeted 6,244 times, and got 13,396 likes. The public sometimes urges an explanation about a policy more. Not only in the technical aspect, but also from the healthcare professional's perspective.
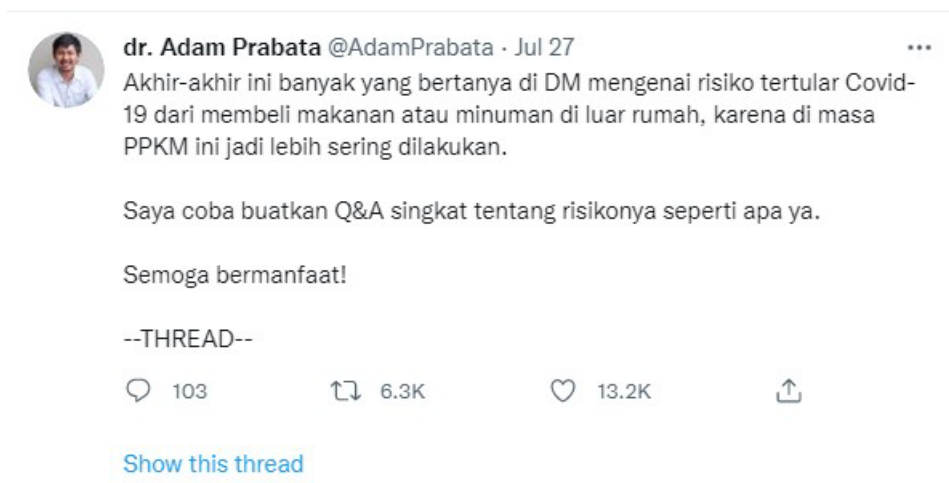
Figure 4. dr. ADAM'S QnA Thread about "*PPKM*" Policy from a Medical Perspective

The way another country response to the pandemic is also gaining public attention. Prof Zubairi, in his tweet, provides several updates on the pandemic situation in Australia and US, as follows. He emphasizes how strict the policy works in Australia. He also updates the situation in the US as this country reached a very high number in vaccination, but still, suffer quite a lot after. This kind of insight is also what people need to know. So, they will be able to reflect the situation to what is currently happening here in Indonesia.

Figure 5. The Pandemic Updates in Australia and United States Provided by Prof. Zubairi

Several tweets tend to criticize the government policy, such as Ivermectin usage as Covid-19 medicine. The doctors stated that it is medically risky and unproven. In this context, the government promote the usage, while the Indonesian Physicians Association (IDI) denied it. From Twitter, several doctors disseminate it consistently, that Ivermectin is not eligible as Covid-19 medicine. Later, this medicine was listed as unnecessary medicine by IDI and unapproved by The National Agency of Drug and Food Control (BPOM).
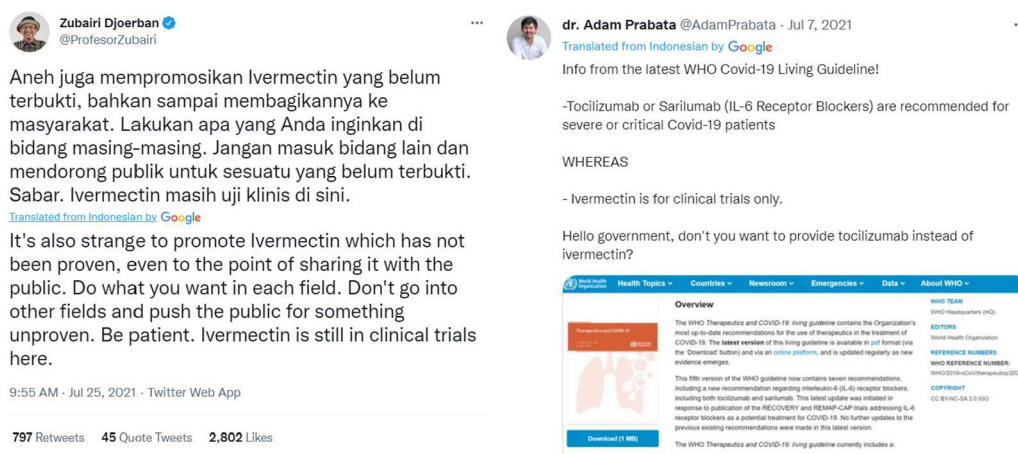
Figure 6. The Narrative related to Covid-19 False Drug

5. Data

The discussion of data and scientific references is another issue discussed by doctors. In this theme, the doctor account @AdamPrabata is the most tweeting (31%). The scientific references discussed by this account include the effectiveness of the vaccine, the Delta virus variant, and daily case data. This account uses scientific journal references linked in tweets about the theme. Another account that is quite active in discussing this theme is @drpriono1, which tweeted daily case data.

Table 6. Percentage of Tweets about Covid-19 Data in Indonesia (during Emergency Public Activity Restriction)

No	Name	Username	Tweet	Total Tweet	Percentage
1	dr Adam Prabata	@AdamPrabata	62	200	31,00%
2	dr Pandu Riono	@drpriono1	21	200	10,50%
3	dr Dirga Rambe	@dirgarambe	9	200	4,50%
4	dr Zubairi Djoerban	@ProfesorZubairi	3	200	1,50%
5	dr Tirta Mandira Hudhi	@tirta_cipeng	1	200	0,50%
6	dr Jaka Pradipta	@jcowacko	0	200	0,00%
7	dr Gia Pratama	@GiaPratamaMD	0	200	0,00%
8	dr berlianidris	@berlianidris	0	200	0,00%
9	dr Andi Khomeini Takdir	@dr_koko28	0	200	0,00%
10	dr Tompi	@dr_tompi	0	200	0,00%
			96	2000	4,80%

Source: Research Result (2021)

The healthcare professionals often shared their perspective react to the data and the trend related to the outbreak. They give their opinion based on their expertise, sometimes with scientific arguments. Dr. Pandu Riono tweeted the flatted of active cases in late August 2021. He stated that people should stay in masks although the situation is getting better. While dr. Adam Prabata provides the data of Sinovac's efficacy against the Delta variant. This tweet is also one of the most liked in our data. The public seems to react positively after reading this fact. The public needs this kind of insight to interpret what to do after reading the data.

Another theme raised in the doctors' tweets was the risks and symptoms of Covid-19 (4.45%). Also, Infodemic included misinformation, disinformation, information overload, pandemic fatigue (4.00%), medicines, and vitamins. (3.25%) especially regarding the use of Ivermectin and Azithromycin for the treatment of Covid-19 patients, mortality (2.80%), and viral variants (2.10%).
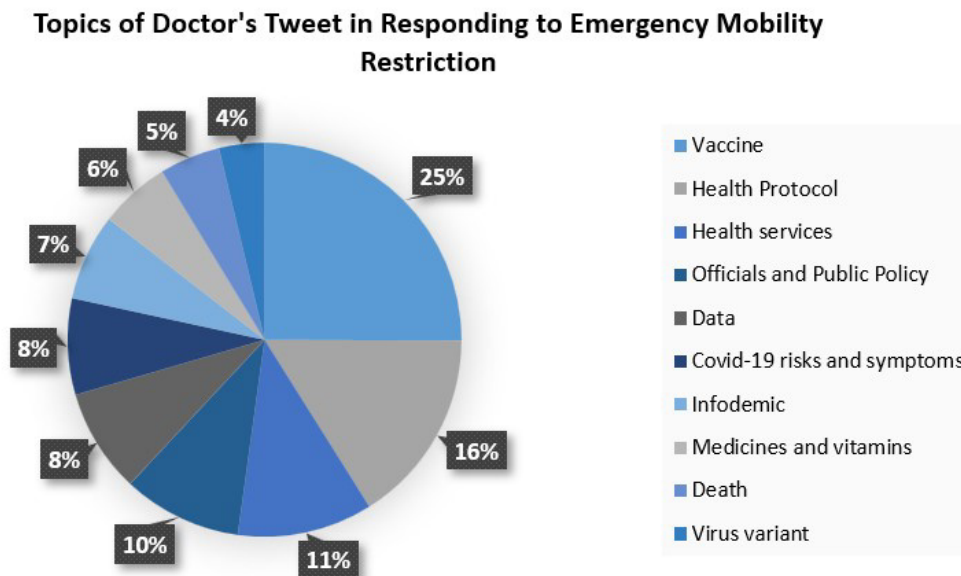
Topics of Doctor's Tweet in Responding to Emergency Mobility Restriction

- Vaccine — 25%
- Health Protocol — 16%
- Health services — 11%
- Officials and Public Policy — 10%
- Data — 8%
- Covid-19 risks and symptoms — 8%
- Infodemic — 7%
- Medicines and vitamins — 6%
- Death — 5%
- Virus variant — 4%

Figure 7. The Doctor Tweets' Theme during Emergency Public Activity Restriction
Source: Research Result (2021)

Tweeting to the Press

Doctors actively and consistently reporting the current situation of the pandemic. Specifically, on Twitter, it is noticeable that what they tweet is not only read and retweeted by their followers. But also become a reference for various mass media. In this chapter, the reasearcher explain about how twitter affect the way journalist work. With the coming of new media, journalism practices have also adapted (Graham & Smart, 2010; Hermida, 2013). Twitter, which contains statements from prominent figures, is seen by journalists as a new citeable source for their news, called "Tweeting for the press" (Holtz-Bacha, 2017). To see how far this practice has been carried out in Indonesia, the team researched with the keywords of each doctor's name on 10 (ten) mass media, namely, Okezone, Tribunnews, Detik, Kompas, Pikiran Rakyat, Kumparan, Liputan 6, Sindonews, Suara, and JPNN, based on Alexa's rank.

Table 7. News related to the Doctors by Online Media (during Emergency Public Activity Restriction)

Media	News by Tweet	News related to the doctor	Ratio News from Tweets (%)	News related to the doctor overall (up to August 23rd)
Okezone	30	106	28%	1183
Tribunews	11	104	11%	4140
Detik	48	162	30%	1320
Kompas	9	94	10%	6764
Pikiran Rakyat	99	150	66%	563
Kumparan	27	34	79%	1321
Liputan 6	16	95	17%	3982
Sindonews	23	86	27%	1573
Suara	24	131	18%	4062
JPNN	6	39	15%	1880
Total	293	1001	29%	26788

Source: Research Result (2021)

On average of 30% of news is produced from 10 (ten) samples of online media. It means that almost 1 of 3 news related to the doctors, during the Emergency Public Activity Restriction period, was produced by quoting the doctor's tweets. Pikiran Rakyat and Kumparan became the media with the highest tweeting to the press ratio with 66% and 79%, respectively. Even in some media, the ratio of tweeting the press reaches 100% for certain doctors as shown in the following table:

Table 8. Tweeting to the Press with 100% Ratio (during Emergency Public Activity Restriction)

Media	Artikel	Artikel dari Twitter	Rasio	Dokter disebut
Tribunews	1	1	100%	dr Koko
Pikiran Rakyat	4	4	100%	dr Koko
Pikiran Rakyat	10	10	100%	dr Zubairi
Kumparan	11	11	100%	dr Zubairi
Kumparan	9	9	100%	dr Pandu
Pikiran Rakyat	1	1	100%	dr Adam
Sindonews	1	1	100%	dr Adam
Suara	2	2	100%	dr Adam
JPNN	2	2	100%	dr Tompi
Okezone	1	1	100%	dr Tompi
Pikiran Rakyat	3	3	100%	dr Berlian

Source: Research Result (2021)

In Pikiran Rakyat, 10 (ten) articles related to Prof. Zubairi Djoerban all from his tweet. Pikiran Rakyat raised some issues such as availability of oxygen, the procedure of self-isolation, the use of vitamins and medicines, also the narratives related to the Delta variant of the covid-19. In other media, Kumparan, 11 (eleven) news related to Prof. Zubairi Djoerban were entirely from his tweets. This means that in the Emergency Public Activity Restriction period from July 3, to August 23, 2021, all articles in Kumparan related to Prof. Zubairi were taken from Twitter.

From the doctor's side, researchers captured 586 news related to doctors during the Emergency Public Activity Restriction period came from tweets. Prof. Zubairi became the doctor with the highest number, by 210 articles. Researchers assume this regarding his position at the Indonesian Doctors Association (IDI) as the head of the IDI COVID-19 task force. This position makes statements conveyed through tweets considered as representations of tweets from IDI by journalists.

The next doctor who gets lots of attention through his social media activity is dr. Tirta. His name is recently raising during the pandemic in Indonesia. Apart from Twitter, Tirta is also active in producing content on Instagram and Youtube. The content often responds to the current situation. It makes the media have plenty of issues to explore from Tirta. Another doctor with adequate media attention is dr. Pandu Riono. As an epidemiologist from the University of Indonesia, dr. Pandu Riono is one of the healthcare professionals whom widely referenced. Dr. Pandu Riono should be mentioned for his courage to criticize the government for the strategies taken. He assumed that the government was still not properly manage fundamental action. His position makes the media often refer to Dr. Pandu as a second opinion on what the government had stated.

The following table is the sum of news that related to each doctor's tweet on the online media during the Emergency Public Activity Restriction period:

Table 9. Sum of News related to Each Doctor's Tweet (during Emergency Public Activity Restriction)

Sum of News	Total
Sum of news dr Zubairi by Tweet - PPKM	210
Sum of news dr Tirta by Tweet - PPKM	162
Sum of news dr Pandu by Tweet - PPKM	140
Sum of news dr Tompi by Tweet - PPKM	38
Sum of news dr Koko by Tweet - PPKM	16
Sum of news dr Adam by Tweet - PPKM	12
Sum of news dr Berlian by Tweet - PPKM	6
Sum of news sdr Jaka by Tweet - PPKM	2
Sum of news dr Gia by Tweet - PPKM	0
Sum of news dr Dirga by Tweet - PPKM	0
Total	586

Source: Research Result (2021)

Back on the media side, a total of 293 news related to the ten (10) research subjects were found. Pikiran Rakyat became the online media with the most articles that citate from tweets, followed by Detikcom, Okezone, Kumparan, and Sindonews. Of course, this practice of quoting is much more practical in terms of news production. Since the journalists only need to see the text and context of the tweet and then write it down as an article. In addition, work from home factor probably plays a role in this phenomenon. The demand to produce several news stories one day makes journalists convenient by citing tweets as news sources.

Table 10. Media and Number of News Sources from Twitter of Doctors (during Emergency Public Activity Restriction)

Media	Total News by Tweet
Pikiran Rakyat	99
Detik	48
Okezone	30
Kumparan	27
Suara	24
Sindonews	23
Liputan 6	16
Tribunews	11
Kompas	9
JPNN	6
Total	**293**

Source: Research Result (2021)

In fact, not all Twitter account owners are willing their tweets to be quoted without permission. dr.Tirta, for instance, clearly stated that he did not want to be quoted without confirmation regarding his tweet. Also, dr. Koko objected to the editor of Republika Online for quoting from his tweet without prior confirmation.

Figure 8. dr. Tirta on Twitter

CONCLUSION

Based on the content analysis from 10 (ten) doctors' accounts, 5 (five) main topics were narrated during emergency mobility restrictions (PPKM, 3 July – 23 August 2021), namely vaccinations, health protocols, health facilities, public policies, and data. The role of doctors as referrals during the pandemic also takes part in advocating for issues such as vaccination policies, Covid-19 literacy, Covid-19 treatment regulations, and data transparency. Those narratives are then amplified by the mass media. It became the source of the news by journalists through the practice of "tweeting to the press". An average of 30 percent of online media coverage during PPKM quoted doctors' tweets literally. Kumparan (79%) and Pikiran Rakyat (66%) were the media that most frequently quoted doctors' tweets. Prof. Zubairi, dr. Tirta and Dr. Pandu Riono are 3 (three) doctors whose tweets are the most frequently in the news. The more significant their voice, the doctor must also understand the risks and responsibility to society.

This study recommends further research to explore the sentiments and impact of doctors' narratives during the pandemic. Also, see the significance of the practice of tweeting to the press in advocating other public issues outside of health issues and pandemics. In the domain

of praxis, this study recommends that doctors and health workers practice the ethics of professional public communication and the consequences of each statement, considering the increasingly significant role of health workers as a reference for information.

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