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DATA TRANSPARENCY AND INFORMATION SHARING: CORONAVIRUS PREVENTION PROBLEMS IN INDONESIA

Transparansi Data dan Penyebaran Informasi: Masalah Pencegahan Virus Corona di Indonesia

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ABSTRACT

Background: Information and data of coronavirus outbreak from central government shared publicly was lacking. Such the lack of information and data has several negative impacts, such as confusion about the information experienced by local governments in accessing positive case data at the beginning of the pandemic and the red zone of the spread of the corona virus, "panic buying" by the community, and confusion on finding accurate data source to respond to the corona pandemic.
Aim: This study analyzed the Indonesian Government's attitude in providing information and data transparency of the latest coronavirus outbreak to the public in Indonesia.
Method: This study was qualitative research with a content analysis approach. Some information in this analysis was retrieved from COVID-19 official websites of the Indonesian Government and other Indonesian governmental institutions. To deepen the analysis, this study also featured South Korea and Singapore official websites. Other information was also obtained from mass media, social media, and policy briefs.
Results: Coronavirus data transparency in Indonesia was still insufficient as seen from the information and data on the official COVID-19 website. Since the first coronavirus case was announced on March 2nd to March 17nd, 2020, the Government also did not provide comprehensive data on the outbreak through official speeches. The process of case tracking was also not carried out openly. Some case tracking innovations were also released late and massive coronavirus tests for tracking cases also did not run optimally. Information and data delivered to the public through policy speeches were inconsistent and closed in nature.
Conclusion: Insufficient data transparency and information sharing can be seen from the availability of partial data on website, not optimal case tracking process, and inconsistent and instransparant information conveyed through policy messages.

Keywords: Coronavirus, data transparency, information, prevention.

ABSTRAK

Latar Belakang: *Informasi dan data yang disampaikan oleh pemerintah pusat kepada publik terkait perkembangan virus corona sangat minim. Minimnya data dan informasi memberikan dampak negatif seperti kebingungan yang dialami oleh pemerintah daerah dalam mengakses data kasus positif di awal pandemi dan zona merah penyebaran virus corona, "panic buying" pada masyarakat, dan kebingunan dalam mendapatkan sumber data akurat untuk merespon pandemic corona.*
Tujuan: *Penelitian ini menganalisis sikap pemerintah Indonesia dalam memberikan informasi dan transparansi data kepada masyarakat terkait penyebaran virus corona di Indonesia.*
Metode: *Penelitian ini merupakan penelitian kualitatif dengan pendekatan analisis konten. Beberapa informasi yang digunakan dalam analisis ini bersumber dari website resmi COVID-19 pemerintah Indonesia dan lembaga-lembaga pemerintah Indonesia lainnya. Untuk memperdalam analisis, penelitian ini juga mengkaji website resmi Korea Selatan dan Singapura. Informasi lain juga didapat dari media massa, media sosial, dan policy brief.*
Hasil: *Transparansi data coronavirus di Indonesia masih minim seperti yang terlihat dari konten yang ditampilkan dalam website resmi COVID-19. Sebelumnya pemerintah pusat juga tidak memberikan data komprehensif tentang penyebaran virus tersebut melalui pidato resmi. Kurangnya transparasi juga terlihat dalam proses pelacakan kasus yang tidak dilakukan secara terbuka. Beberapa inovasi pelacakan kasus juga terlambat dirilis, selain itu tes massal untuk melacak kasus juga tidak berjalan dengan optimal. Informasi dan data yang disampaikan kepada publik melalui pesan kebijakan bersifat inkonsisten dan tertutup.*
Kesimpulan: *Transparansi data dan pembagian informasi yang minim terlihat dari ketersediaan sebagian data di website, pelacakan kasus yang tidak maksimal, dan informasi yang disampaikan melalui pesan kebijakan masih tertutup dan tidak konsisten.*

INTRODUCTION

The spread of the coronavirus in Indonesia has continued to dramatically increase since the announcement of the first case on March 2nd, 2020. In April, coronavirus has spread and infected more than 5,000 people (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). Due to the outbreak, the mortality rate in Indonesia was quite high with a total of 582 deaths with Case Fatality Rate (CFR) of 8.9% on April 19th, 2020 (Indonesian Ministry of Health, 2020). The percentage of deaths due to coronavirus in Indonesia exceeds the global CFR of 5.85% on April 19th, 2020 (Worldometers, 2020). Moreover, when looking at the trend of the increasing spread per day from March 25th, 2020 to April 19th, 2020, an average of more than 100 people every day were positively infected by the coronavirus (Indonesian Ministry of Health, 2020). If the negative effects of the pandemic continue, the government has a greater responsibility to solve this problem. The burden on the government is that the government needs to take action or respond harder to solve coronavirus problems.

In urgent conditions, the Government should take responsive steps to produce policies based on accurate data. Indeed, from the second week of March to the first week of April, the Government issued early appeals to avoid the spread of viruses, such as social distancing policies and large-scale social restriction policies (PSBB). However, the government faces many problems in responding to this pandemic (Secretary of the Cabinet of the Republic of Indonesia, 2020).

The main problems faced by the Indonesian government when responding to the pandemic include the government's inability to manage information and the lack of publicly accessible data related to the spread of corona (Djalante *et al*., 2020). The lack of information causes confusion among the community and the Government itself at the central and regional levels (Purwanto, Kumorotomo and Widaningrum, 2020). Furthermore, the lack of open information also raises various new problems, such as panic buying, negative stigma in patients with positive corona, and rejection towards ODP status (Institute for Research, Education and Information on Economy and Social Affairs, 2020).

Poor manifestations of management and data transparency of coronavirus by the central government can also be seen from the absence of a single transparent public information channel (Agahari, 2020). In fact, an open government can increase public trust in the government as a reliable source of information providers (Song and Lee, 2016; Wanna, 2018; Porumbescu *et al.,* 2019; Cucciniello and Nasi, 2014).

Information to the public about coronavirus is spread in the National Disaster Management Agency of Indonesia and the Indonesian Ministry of Health to the provincial and district / city levels in Indonesia (Wahyuni and Ambardi, 2020; East Java COVID-19 Report, 2020). One of the problematic coronavirus information flows between districts, provinces and central government can be seen in Yogyakarta Regional Government (Idhom, 2020). There are differences in the number of coronavirus positive cases between Yogyakarta province and the central government.

On corona.jogjaprov.go.id website, there were 19 positive cases on March 27th, 2020. Positive case data in

Yogyakarta province were obtained by tracking through Yogyakarta Environmental Health and Disease Control Bureau (BBTKLPP) and COVID-19 referral hospitals in Yogyakarta (Pertana, 2020). While the central government reported that Yogyakarta Province on March 27th, 2020 had a total of 22 positive cases as posted on the central government's COVID-19 website (Idhom, 2020). The flow of coronavirus data tracking by the central government was not mentioned in detail to the public (Idhom, 2020). Data about people under surveillance (ODP), patients under surveillance (PDP), recovered cases and deaths were released by each institution via the website. The Indonesian National Disaster Management Agency published this data through the covid19.bnpb.go.id website. While districts or provinces had their respective websites, for example East Java through the infocovid19.jatimprov.go.id website or West Java through the pikobar.jabarprov.go.id website. Therefore, people feel confused in finding information about the pandemic.

This study analyzed data transparency and information sharing of coronavirus to the public in Indonesia. Some important points such as merely incomplete data on the official government websites, transparency, limitations and inconsistencies of the government's policy were rendered.

METHOD

This study used a qualitative method with content analysis. It collected actual information of coronavirus on COVID-19 official websites of the Indonesian Government and other Indonesian governmental institutions from the first week of March to the third week of April 2020. The official websites analyzed included www.covid19.go.id, www.kemkes.go.id, www.kominfo.go.id,

www.ombudsman.go.id, www.setkab.go.id, and www.radarcovid19.jatimprov.go.id. In addition, the data were collected from mass media, social media and policy briefs.

This study also compared some information on COVID-19 official website of Indonesia (www.covid19.go.id), South Korea (www.ncov.mohw.go.kr), and Singapore (www.moh.gov.sg/COVID-19). This study made the comparison because South Korea and Singapore have succeeded in suppressing the distribution of coronavirus and transparently shared information of coronavirus with the public on their official websites (Son, Lee and Hwang, 2020; Ahn, 2020; Fisher, 2020; Winanti, Darmawan and Putri, 2020). This study searched some information through menus displayed on those websites (see Table 1).

RESULTS AND DISCUSSION

Open government is a concept that discusses openness and interactive information that is built by the government to the business sector to citizens (Meijer et al., 2012; Geiger and von Lucke, 2012). Open Government is implemented in governance activities for 3 reasons, namely transparency, social releasing and commercial value and participatory governance (Attard et al., 2015). In addition, open government is also needed to narrow the gap that has occurred between the government and citizens (Wijnhoven et al., 2015). Open Government is needed not only in normal governance situations (Cahlikova and Mabillard, 2019). Open government is also needed in crisis situations such as disasters to global pandemics (Lan, 2005; Brajawidagda et al., 2015; Open Government Parthnership, 2020).

In the context of the coronavirus pandemic, open government becomes a

means for governments to be more open in sharing data to the public and to build models for estimating the spread of viruses. (Open Government Partnership, 2020). Furthermore, this mechanism is needed to dispel misinformation that is spread online and becomes a means of building trust between government and citizens (Open Government Parthnership, 2020).

Table 1. Comparison of COVID-19 Information on Indonesia, South Korea and Singapore Official Websites on April 9th-20th, 2020.

Country	Menu	Information Description
Indonesia	Coronavirus news	Latest news updates about coronavirus.
	Coronavirus distribution data	- Information displayed in the data distribution includes cases by province state. - Cases by province include confirmed cases, recovered cases, and deaths. - Cases by state include national trends, daily change (recovered cases, deaths, and new cases), confirmed cases, treated cases, recovered cases, and deaths.
	Coronavirus protocol	Some COVID-19 guidelines and appeals made by the Indonesia Government to the public.
	Coronavirus education	- Some coronavirus educational materials provided by the government to the communityinclude information of coronavirus and its prevention. These materials were given to several communities, such as general public, parents, health workers, religious and community leaders, teachers and students, mothers and children, as well as entrepreneurs.
	Question and answer sections	Information of coronavirus is explained in forms of questions and answers.
	Government's agenda about coronavirus	Activities done by the Indonesian Government to prevent the spread of coronavirus.
	Hoax buster	List of hoax coronavirus news in media.
	Other information	Regulations, independent reports, a list of referral hospitals, and a group of experts.
South Korea	COVID-19 response	- The Korean Government's response system since February 25th, 2020 in preventing the inflow and spread of the infectious disease. This menu describes preventive efforts by South Korea including managing passengers in public transportation, conducting early detection of infected patients and investigations and quarantine of contacts. - Managing passengers provides special entry procedures, stronger measures for infection prevention and control of overseas entrants, and overseas travel histories to medical institutions. - Information of early detection includes a list of COVID-19 screening stations for people with symptoms. - Information of epidemiological investigations and quarantine of contacts includes how to do epidemiological investigation and monitor contact.
	Patient treatment	Guidelines of treatment and support for suspected

Country	Menu	Information Description
	and management	symptomatic people, confirmed patients, and patients discharged from quarantine.
	Cases in South Korea	- Confirmed cases to date (confirmed cases, discharged from quarantine, quarantined, and death). - Imported cases (classification by country of origin, confirmation stage, and nationality). - Testing in Korea Confirmed cases (quarantined, discharged from quarantine, and deaths), negative results, in-progress, a breakdown of confirmed cases per region, a breakdown of cluster outbreaks. - Daily and cumulative number of confirmed cases. - Daily and cumulative number of people discharged from quarantine. - Cases in Korea by city/province. - National distribution (confirmed cases, daily change, deaths, and discharged from quarantine). - Daily change (imported cases and local outbreak). - Confirmed cases (isolated, discharged from quarantine, and deaths). - Global locations of COVID-19 spread (Global statistics). - Confirmed cases and deaths by country.
	Media resources	- Press release about the updates of coronavirus.
	Public advice	- Some guidelines and appeals of coronavirus for public.
	Publication and briefing	- Materials as briefings for implementing policies of the outbreak prevention.
Singapore	Current situation	The latest data of the coronavirus outbreak, such as total cases, total active cases, total patients in ICU and general wards, total isolation, total discharged patients from hospital, total free from isolation, and total demised cases.
	Summary table for daily report	Case number, date of confirmation, hospital admission, age, gender, nationality, travel history, exposure, relationship with other cases, and cluster.
	Number of cases	- Imported new cases, community new cases, total average movement in 7 days, average imported movement in 7 days, and average community movement in 7 days. - Epidemic curve of community based on press release date and symptom onset date. - Average number of days from onset of symptoms to isolation.
	Case status	- Current admission at hospitals by day (ICU and general wards). - Number of care facilities by day. - Recovered cases by day (complete isolation and discharge). - Demised cases by day. - Total cases by day.
	Stay at home notices and	- Stay at Home Notice (SHN) by press release date. - Number of individuals under Stay at Home Notice (SHN)

Country	Menu	Information Description
	quarantine orders	by press release date. - Daily Quarantine Orders (QOs) issued. - Active number of People Under Quarantine (PUQ).
	Symptoms checker	Some questions are available online to detect coronavirus based on risk factors and symptoms.
	Public Health Preparedness Clinic (PHPC)	The detector is used to find the nearest public health preparedness clinic to detect emergency situation.

Source: Indonesian Task Force for the Acceleration of Handling COVID-19, 2020; Ministry of Health and Welfare of South Korea, 2020; Ministry of Health of Singapore, 2020.

One of the most important elements of open government in dealing with a coronavirus pandemic is transparency of data and information sourced from the government (Spalluto *et al.,* 2020). Data transparency amid the turmoil of a pandemic needed to manage fear and anticipation of uncertainties to the reference in the decision (Spalluto *et al.*, 2020). Data transparency in times of disease crisis is the basis for the government in identifying positive cases of corona based on big data analysis that can track travel history and clinical symptoms (Duff-Brown, 2020). Various countries and regional organizations have implemented data transparency based policies to dispel the spread of the corona virus (Open Government Parthnership, 2020).

Different responses were showed by Indonesia in facing corona virus outbreaks. At the beginning of the coronavirus outbreak in March, the Indonesian government was considered not transparent in providing data to the public (Djalante *et al.*, 2020). One form of closed government related to data can be seen from the delay in the formation of a single channel of corona virus information that was only released on March 18th, 2020 (Monggilo, 2020). The Indonesian government is also not transparent in providing data related to the potential spread of disease and the path of tracking corona virus cases (Rezkisari, 2020). This ambiguous condition is exacerbated by the attitude of the Government of Indonesia which also seems contradictory in providing information to the public through various policy messages (Widaningrum and Mas'udi, 2020). In detail, this study will present three sub-chapters of data transparency and information sharing problems to the public in dealing with the spread of the corona virus in Indonesia.

Limited and Inconsistent Public Information

The first statement on the urgency of integrating data and information finally came out of the Indonesian President's speech in a limited teleconference about the COVID-19 task force on April 13th, 2020 (Presidential Secretariat, 2020). It seemed very late because the speech just came out after the corona outbreak has occurred for 40 days and infected nearly 4557 people in Indonesia (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). It needs to be noted that ideally since the beginning, the Government should have encouraged public information transparency.

Looking back at the beginning of coronavirus occurence in Indonesia, the Government gave a policy speech that seemed inconsistent (Purwanto, Kumorotomo and Widaningrum, 2020). Previously, the Government stipulated a policy of boosting the tourism sector by giving significant aircraft discounts. In addition, the Indonesian Ministry of Health also stated that Indonesia was not

vulnerable to corona (Triwibowo, 2020). The conditions turned drastically when the Government confirmed two initial positive cases (Triwibowo, 2020). Information which was contradictory to the Government's policies resulted in panic buying and widespread public unrest (Institute for Research, Education and Information on Economy and Social Affairs, 2020). The inconsistent public information delivery cannot be separated from the lack of scientific-based research conducted by the Government (Djalante *et al.*, 2020). It has some side effects, such as "scientific Pseudo" and racial, religious, and mystical arguments in dealing with coronavirus (Djalante *et al.,* 2020). On February 18th, 2020, the Indonesian Minister of Health, Terawan said that prayer could avoid coronavirus in Indonesia (Persada, 2020). On April 2th, 2020, the Coordinating Minister of Maritime and Investment Affairs, Luhut Binsar Pandjaitan claimed that coronavirus would disappear due to hot weather in Indonesia (Nur Hakim, 2020).

When coronavirus is increasingly widespread, the Indonesian Government has taken some policies that tend to be closed, especially in providing public information (Agahari, 2020). The websites of Indonesian Ministry of Health and Indonesian National Disaster Management Agency present lack of data (Agahari, 2020). Until the second week of April 2020 the National Disaster Management Authority and the Ministry of Health's website only displayed general data such as the number of positive cases, ODP, PDP, death and cured patients (Indonesian Ministry of Health, 2020; Agahari, 2020). Furthermore, the website of the National Disaster Management Authority and the Ministry of Health displays data formats that are difficult to be reprocessed by non-state parties (academics, think thank or companies) to use them (Agahari, 2020). Meanwhile, the public needs open, accurate and comprehensive data to respond to the COVID-19 outbreak. Open data of the pandemic distribution can increase public trust on the government and result in community stability (DroneEmprit, 2020). On the contrary, data hidden from the public will actually create the government's mistrust in taking action against the pandemic (Hamzah *et al.,* 2020).

The next problem is the unsynchronous data between the central government and the local governments. For example, mismatch of confirmed cases occurred between the Central Government and the Regional Government of Banten Province (Indonesian Ombudsman, 2020a). Moreover, the number of confirmed cases were not synchronous between the provincial government and the district/ city government (Indonesian Ombudsman, 2020b). For instance, the Banten Provincial Government had different data from the South Tangerang Government. On April 6th, 2020, the number of deaths reported by the Banten Provincial Government and South Tangerang Governmentwas not the same. The Banten Provincial Government on April 6th, 2020 reported 22 deaths, while South Tangerang Government reported additional 24 deaths (Rabbani, 2020).

Transparency of Case Tracking

At first, the COVID-19 prevention and control method was formulated by the Directorate General of Disease Control and Prevention and released on the COVID-19 website (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). One of information displayed is close contact tracking among positive cases. The case tracking was carried out in three methods, such as identifying contacts, collecting close contact data, and following up to record the close contact traces. Besides, the

identification of close contact was conducted to people who interacted with patients and associated with places where patients ever visited in the last two days (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). However, the identification method was not defined in detail. There was no detailed information regarding the methods of tracking the distribution of cases and the steps of methods used to do this. The method formulated only provides records of received data (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020).

Furthermore, after 43-day spread in Indonesia, the Indonesian Ministry of Communication and Information created a digital application on April 14th, 2020 to track people at risks of virus transmission. It is called *Peduli Lindungi* or Care Protect. *Peduli Lindungi* App is used to track people who interact with people under surveillance and patients under surveillance. This application works by looking at the radius of detected cases as detected on the mobile Bluetooth (Peduli Lidungi, 2020). Another new innovation*, East Java COVID-19 Radar,* was also made and relased on the official websites of East Java Province on April 15th, 2020 (East Java COVID-19 Radar, 2020). The *COVID-19 Radar* provides information on a radius of 1 km from the confirmed positive patients' residence and only informs the presence history of the previous patients (East Java COVID-19 Radar, 2020).

Resilient health systems are needed in disaster situations, one of which is a health information system and surveillance network that is able to accurately show the current situation and health threats in real time. This is important for making predictive modeling (Kruk *et al.*, 2015). One of the information that must be provided transparently is a complete case

tracking flow. South Korea is an example that provides transparency in tracking data. They announced information about methods and flows of case tracking in detail on the official COVID-19 website that they have created. In tracing cases, they used subjective and objective data. Subjective data were taken from interviews with people who have the possibility of interacting with patients. Whereas, objective data were collected from medical records, mobile GPS, and credit card records (Ministry of Health and Welfare of South Korea, 2020). In tracking cases, the objective data can have an important role in providing more accurate information compared to subjective data. Tracking via GPS, card transactions, and CCTV will provide location data, time of exposure and detailed situations (COVID-19 National Emergency Response Center, Epidemiology & Case Management Team and Korea Centers for Disease Control & Prevention, 2020).

Mass testing was an option for tracking cases, but the Indonesian Government was late to stipulate mass testing policy. The Indonesian President, Joko Widodo just released a mass testing policy to detect cases early on March 19th, 2020 (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). The tools used for mass tests were also still being questioned by the public. Some experts claimed that the rapid detection kits (RDT) were in use to conduct early detection, but these had low accuracy. Polymerase Chain Reaction (PCR) was believed to have higher accuracy compared to RDT. The World Health Organization have already confirmed on this issue (Djalante *et al.*, 2020; World Health Organization, 2020). Low accuracy may result in wrong data and affect the data analysis process. Moreover, only people who have a positive RDT result can do a PCR test for confirmation. While for those with negative

results, PCR tests will be done when patients have done the test several times after an interval of 5-7 days (Djalante *et al.*, 2020). Therefore, WHO recommended countries should coordinate and collaborate to conduct more PCR tests. They must build infrastructure for the laboratory procurement in all provinces (Worl Health Organization, 2020).

After the implementation of mass tests, it was found that the tests were only distributed to around 240 people every day in early April (Lidwina, 2020). It is far different from South Korea, where mass tests were conducted to 15.000 people every day (Lidwina, 2020). Until April 14th, 2020, the number of specimens received was 27953 (Indonesia Ministry of Health, 2020). While South Korea obtained 527,438 specimens (Ministry of Health and Welfare of South Korea, 2020). Tests using the PCR method were also low until the second week of April. The average PCR examination is less than 2,000 per day (LaporCovid19, 2020).

Also, information regarding the flow of mass testing services was not clearly informed by the Indonesian Government. There is no transparent information about health facility which serve the test and no clear information about the criteria of testing recipients (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). Since the initial release of the policy regarding mass tests, the Government should have informed which healthcare facilities serve as testing centers. In contrast to South Korea, the South Korean Government set up a screening centers for mass tests. Mass testing has been done not only in health clinics, but also drive-thru and walk-thru inspections (Ministry of Health and Welfare of South Korea, 2020). Mass testing is the beginning of tracking the coronavirus outbreaks, and thus it must be done optimally. Case tracking data can also allow easier implementation of

isolation policies in avoiding places with high risks (Pang *et al.*, 2020). The World Health Organization (WHO) has also given guidance to countries in the world to conduct early detection, and thus patients who are diagnosed early will have smaller disease severity. In addition. Early test for all countries worldwide also describe the case trend with detailed supervision (World Health Organization, 2020).

Partial Official Website Data Update

The Indonesian government seemed not transparent in the display data to the public through the official website (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). The official government website should display comprehensive data related to the spread of coronavirus. However, the data content displayed on the official website COVID-19 was only partial (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). In addition, the process of collecting data displayed through the official website of the central government was also not comprehensively explained to the public. The central government was making the COVID-19 official website late. Previously, information about coronavirus was spread from several websites such as Provincial, District and Ministry of Health official websites. Resulting in overlapping data between the central and regional governments (Djalante *et al.,* 2020).

South Korea and Singapore showed different conditions. South Korea and Singapore become countries that provide reliable data and information through their official website (Winanti, Darmawan and Putri, 2020). They released more comprehensive distribution data in their official website (Ministry of Health and Welfare of South Korea, 2020; Ministry of Health of Singapore, 2020). The Indonesian Government did not release some important content such as the

progress of mass tests among the community on this website. This information is not centralized on one official website. The progress of mass testing was just released on the Indonesian Ministry of Health. However, it only released specimens received and negative examination results (Indonesian Ministry of Health, 2020). South Korea showed a comprehensive and transparent mass testing data. This country released not only the cumulative number of people tested, but they also more detailed data such as confirmed cases on specimens that have been received. Quarantined cases and deaths of confirmed cases were also published on their website (Ministry of Health and Welfare of South Korea, 2020). Other than that, they also provided information on in-progress test, a breakdown of confirmed cases per regional, and a breakdown of cluster outbreaks.

The Indonesian Government also did not release the cluster spread of coronavirus cases on this COVID-19 website (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). The website of Indonesian Ministry of Health and the COVID-19 official website created by provinces and districts also did not display this content. In fact, grouping cases into several clusters is important for the investigation process. Cluster determination becomes an important point for supervising people with positive symptoms and risks of transmission to the closest people (Pung et al., 2020). The grouping of cases into clusters has been carried out in Singapore and released on its official website. Singapore has provided clusters with information of places and source of infections such as local and imported cases to the public (Ministry of Health of Singapore, 2020). Even, this website also provides information of coronavirus cases in detail. This website displays cases by

age, gender, nationality, country of origin, travel history, exposure, relationship with other cases, cluster (Ministry of Health of Singapore, 2020).

On the Indonesian COVID-19 website, the development of patient treatment at hospitals was not carried out transparently.The Indonesian Government only provided information on the cumulative number of patients treated at several hospitals (Indonesian Task Force for the Acceleration of Handling COVID-19, 2020). The Singapore official website can be a reference for the Indonesian Government in providing more detailed information. The website also displays patients who were currently admitted to ICU and general wards by day, the number of care facilities by day, and recovered cases by day (complete isolation and discharge) (Ministry of Health of Singapore, 2020).

All important information was shown in the menu display on the official websites of Singapore and South Korea (Ministry of Health and Welfare of South Korea, 2020; Ministry of Health of Singapore, 2020). South Korea provided information on several guidelines in detail. They provided information on management to passengers from abroad to prevent coronavirus outbreaks, epidemiological investigations, quarantine and mass test procedures, also provided in detail on this website (Ministry of Health and Welfare of South Korea, 2020). Singapore's official website also provided information about the nearest public health preparedness clinic to the public (Ministry of Health of Singapore, 2020). This clinic provided a general service to conduct tests for those who have mild symptoms and determine whether patients require serious medical services or not without going to hospitals (Campbell and McGregor, 2020).

From the descriptions above, the Indonesian Government did not provide transparent and comprehensive data on their official websites. Compared to South Korea and Singapore, Indonesia's official websites had weaknesses in displaying the progress of mass tests, the spread of

coronavirus clusters and the development of patients at hospitals. In addition, South Korea and Singapore provided some important data, for example management of overseas passengers, epidemiological investigations, quarantine and mass test procedures and the nearest public health preparedness clinic.

Studies related to data and information transparency in handling corona virus spread are still rarely conducted. In Indonesia, the study became one of the earliest conducted. The results contributed to present the analysis of the government's transparency in presenting data and information to the public. While in China, there were closure and delay in information delivery by the central and local governments (Gao and Yu, 2020). However, this study did not have in-depth analysis but only provided a brief mechanism of closed information (Gao and Yu, 2020).

A study conducted by Alamo et al. (2020) provided an overview of global contact and testing tracking of coronavirus. However, they did not provide a detailed analysis of the website content. This was different from this present study which explained detailed analysis of the coronavirus management in Indonesia, South Korea and Singapore.

However, the data from social media and mass media used in this study had a potential bias related to ideology and tendency of the sources. In addition, this study did not present a coherent time and detailed analysis of each case.

CONCLUSION

The transparency of coronavirus information to the public was still lacking in Indonesia. The official speech of the presidential spokesperson was incomplete, and the official COVID-19 website was not comprehensive. The Indonesian Government was not open to inform methods and case tracking flow, such as mass tests. Some regions still had limitations to confirm RDT tests via PCR.

The speech of COVID-19 policies also contained untransparent information, and the updates of caseswere inconsistent and lacking.

This study had some implications. First, this study rendered the dynamics of implementing COVID-19 policies at various government's levels. Second, this study gave the central and regional governments insights about open government to prevent coronavirus in Indonesia.

CONFLICT OF INTEREST

The authors declared that there was no conlifct of interest in this article.

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