



Social Media and the Public's Involvement in the Disaster's Narrative (Case Study: Bantul Regency, Indonesia)

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Abstract

This research aims to discuss the disaster narration during the PPKM period on the Bantul Regency's social media. This research uses the qualitative method from interviews and social media data analyzed by the Computer Assisted Qualitative Data Analysis (CAQDS). The data were showcased in crosstab analysis and word cloud analysis. The result shows that 1 Bantul District has succeeded in building a community understanding of crises rather than increasing the reputation of actors. The narrative built through crisis knowledge created by the Regional Disaster Relief Agency (BPBD) Bantul Data and Information Center (Pusdalops) needs to be better informed. 2) Then, in the social media dimension of Twitter, COVID-19 data is only presented with updates without showing collaboration between actors. 3) public interaction on BPBD Bantul's Twitter social media was primarily positive, with 63% (supporting all parties in tackling COVID-19), damaging 21% (distrust in COVID-19 data), and neutral 11% (impartial). In word cloud analysis, the dominance of words often used as narratives is Bantul with 31 counts, followed by data, COVID-19, district PPKM, etc.

Keywords: Twitter, bantul regency, covid-19

Paper type: Research paper

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INTRODUCTION

Indonesia is one of the countries affected by the covid-19 pandemic (Djalante et al., 2020; Ifdil et al., 2020; Alam et al., 2021; Megatsari et al., 2020; Tosepu et al., 2020; Windarwati et al., 2020) with positive confirmation cases of 2,950,058, 2,323,666 cures, and 76,200 deaths as of July 20, 2021 (Chaterio, 2021). The Indonesian government then implemented the Enactment of Restrictions on Emergency Social Activities (PPKM) to overcome the COVID-19 pandemic (Mahadewi, 2021). The policy was motivated by an increase of 5-50 thousand cases per day in July and was accompanied by the isolation of hospitals, which reached 90% (Mutia, 2021). Bantul Regency became one of the fourth highest contributing areas of COVID cases nationally and the highest with 44,086 active cases in the Special Region of Yogyakarta (DIY) (Coronajogjaprov, 2021; Covid-19, 2020).

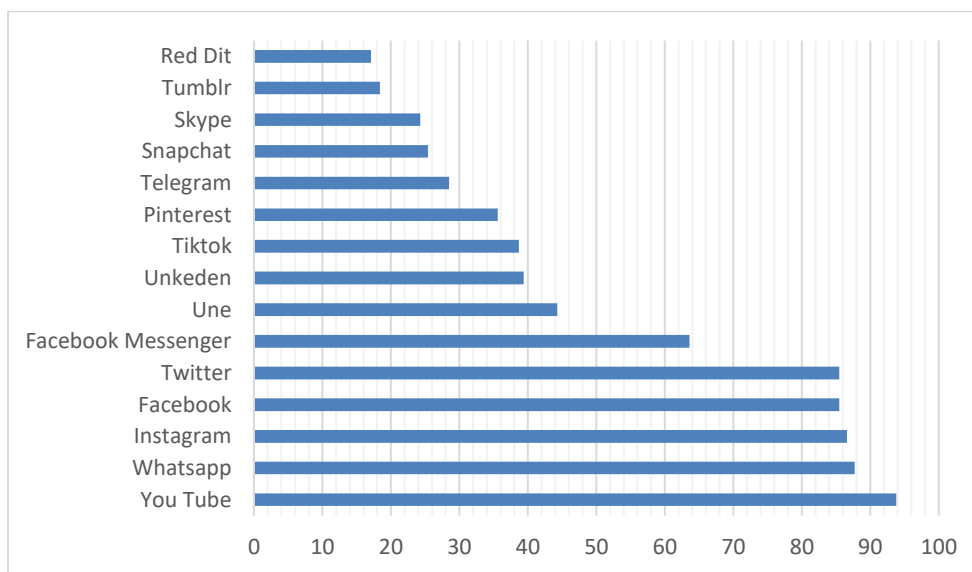
In the Circular Letter of the Minister of Utilization of State Apparatus and Bureaucratic Reform Number 14 of 2021 on the adjustment of public services by utilizing Information and Communication Technology (ICT) in the ERA of PPKM. Social media became a preventive education media in the COVID-19 pandemic (Sampurno et al., 2020). Social media became an essential component in mass communication, which was later adopted as a health promotion strategy (covid-19) to reach and influence all Indonesians together (Satriyatni, Ekna, 2021; Chen et al., 2020; Tang et al., 2021; Wong et al., 2021; Naeem, 2021). The use of social media as a public information and communication platform has two focuses, namely on providing information facilities and placing public engagement following the Regulation of the Minister of Utilization of the State Civil Apparatus (PERMENPAN) Number 83 of 2012 (Purwadi et al., 2019).

Social media has expanded on one of the proven disaster narratives to provide a very rapid and effective response to change in every condition and update the situation or condition in real-time. The role of social media, as described by (Kavota et al., 2020), has several characteristics: 1) the existence of public debate; 2) monitoring situations; 3) crowdsourcing and collaboration; 4) social cohesion; 5) emergency response and management; 6) donations and charities; 7) Increase research consider social media as a technological tool that is very useful in disaster management activities, including situation detection, crisis interaction and communication facilities, and situational awareness. In disaster management, social

media has three models of entities that are in substance, namely differences in process and development, crisis information that the public can access, and verification of the trust of social media users (Mehta et al., 2017).

It is also supported by the expansion of social media that has been entered and applied by all Indonesian people. Internet World Stats data said that the number of Internet users in Indonesia reached 212.35 million (Kusnandar, 2021) and as many as 170 million of them are social media users. The number increased by 15.5% or 27 million people compared to 2020 (Riyanto, 2021). In addition, the number of social media users in Indonesia has occupied the position of the top 10 countries with the highest rate of people with an addiction in the world and the percentage of social media users in the world, including 93.8% YouTube, 87.7% WhatsApp, 86.6% Instagram, 85.5% Facebook, and 85.5% Twitter (Sthepanie, 2021).

Figure 1.
Social Media Users



Source: *We Are Social (Social, 2021)*

The use of social media in the disaster narrative has displayed many results in the results of research. Imran (2020) and Rainear (2018) concluded that in the digital era, people, in general, prefer to use Social Network Systems (SNS) such as Twitter and Facebook as a medium to obtain disaster information. Activities are carried out by posting updates on disaster report situations, infrastructure damage, urgent needs requests, etc. In addition, the utilization of SNS also projects the speed and accuracy of data and information about an ongoing disaster point because it is

supported by the SNS character that has data speed and accuracy (Zhao & Zhou, 2020).

Public sector organizations later adopted the dissemination of disaster information. As a public sector organization responsible for managing disaster governance at the local level, the Regional Disaster Management Agency also utilizes the existence of SNS to disseminate disaster-related information. One of the public sector organizations that adopted SNS as a communication medium is BPBD Bantul Regency, which uses Twitter and social media.

In building a disaster narrative based on SNS on social media, Twitter can be chosen as one of the media that can be adopted to disseminate data and information (Wulandari, 2017). In line with this in research on the dissemination of disaster data and information that has been done (Kirana, 2019; Juswil & Nofrima, 2020; Setiawan et al., 2021; Marasabessy & Samad, 2021), He pointed out that the use of Twitter media by BPBD accounts has been effective in disseminating disaster data and information. It can be seen from several tweets and massive information networks carried out by BPBD. In addition to using the BPBD tweets platform, hashtag symbols are also massively carried out and have implications for one-way communication (Samatan et al., 2020; so that the users can directly receive the message and information conveyed.

At the disaster management stage, it found that BNPB and BPBD have carried out pre-disaster phases (preparedness, early warning, and mitigation), disaster time (emergency response and disaster management), and post-disaster (rehabilitation and reconstruction) (Fahriyani & Harmaningsih, 2019). This is due to the Twitter account's activeness and utilizes #hashtag as a medium of information that often appears. In addition, the results of research on disaster management conducted by (Fay, 2020; Dwivayani & Boer, 2020; Sutedi, 2020) Explain that the findings tend to have implications in a positive direction due to the educational process of public disaster information so that it will minimize the impact of a disaster.

In addition, it has positive implications for the use of Twitter media. It also can potentially increase and reduce data about disaster information and research on Community Response Analysis on Twitter to Disasters in Bantul (Sukarno and Nur 2022; Indratmoko et al., 2019). Another thing is the characteristics of Twitter media

that do not have to be mutually beneficial (not two-way) so that users can also create a free account on Twitter. The use of Twitter media as a digital information platform also poses several threats, such as research conducted (2020) with the finding that policy narratives related to disasters become a war of sentiment between buzzers and influencers. And lastly, opposition groups (critical) are drowning with the negative sentiment activity of the buzzers.

There are several research results regarding public response to disaster information, especially in social media. Yuyun (2017), Yulita (2021), and Isnain (2021) in their research mentioned that public sentiment on disaster information tends to get a positive response and is followed by a neutral and negative response using the Naïve Bayes Classifier approach. In addition, the public also responds to disaster events by still showing enthusiasm in terms of eyes and protection from disasters (Budiarto, 2021).

The results of the study, in general, only use the Naïve Bayes Classifier approach. Naïve Bayes Classifier's approach has some drawbacks, such as the accuracy rate of predictions and only looking from one side (social media) and not from various perspectives. Therefore, in this study, the author will use a different perspective, namely, a crisis communication approach, especially in the era of PPKM, to find out the crisis knowledge obtained from disaster management actors and engagement or public interaction in the social media dimension.

The Regional Disaster Management Agency (BPBD) of Bantul Regency, as an actor in handling COVID-19 at the regional level, has also adopted social media, especially on social media twitter (Pratiwi & Chotimah, 2021). One of these elements is BPBD Bantul Regency through the Disaster Management Operations Data Center (Pusdalops) which serves as a facilitator of operations control and the implementation of information and communication to the entire community (Pratiwi, 2021; Wiryadinata et al., 2019). Through the account @PusdalopsBantul, all the dissemination of disaster data and information is contained for public consumption.

METHODS

This research uses qualitative methods with a case study approach in BPBD Bantul Regency. The data source was obtained through primary data, which was

obtained directly from interviews with Manager Pusdalops BPBD Bantul Regency and social media data to describe and analyze in detail. Disaster narrative is measured by the crisis communication approach (Coombs, 2010) by measuring crisis knowledge built by actors and public interaction in the social media dimension in the era of Emergency PPKM 3-20 July 2021. The analysis was used using Computer Assisted Qualitative Data Analysis (CAQDS), and one of the platforms in it is Nvivo 12plus software (Christina Silver, 2014). Interview results data and social media data are processed through) crosstab features by manually matching all data related to crisis communication, 2) features word cloud to find out the words that are often the subject of discussion as well as display the terms that have been discussed. The data is then presented in the form of crosstab analysis and word cloud analysis. The indicator used is crisis communication seen through crisis knowledge and public interaction (Coombs, 2010).

RESULTS AND DISCUSSION

This section will try to find out about the narrative built-in social media in the case of disaster narratives in the PPKM era in @PusdalopsBantul. Two indicators are used, namely crisis knowledge and public interaction, with two types of analysis: crosstab analysis and word cloud analysis.

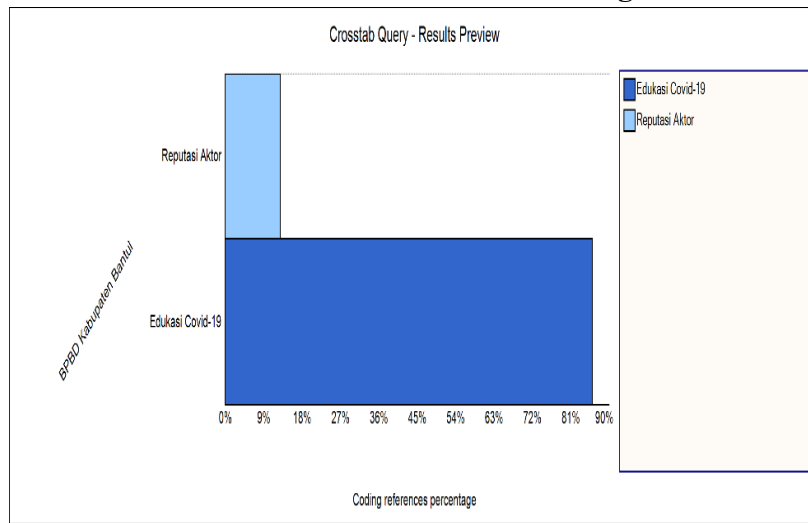
Crisis knowledge is a way of improving public understanding of emergencies. Amid the COVID-19 pandemic, crisis knowledge can be built by educating about COVID-19 and restoring public reputation (Henderson et al., 2020). COVID-19 education provides important guidance on dealing with the crisis (Daniel, 2020) with various strategies in it. In addition, public reputation also has an important role in restoring a good image to the public regarding what is conveyed by public actors. Nature knowledge crisis aspect of education COVID-19 has an important role when the epidemic comes than public reputation (Henderson et al., 2020). If done instead, it will result in a lack of understanding or public knowledge in crises.

“BPBD Bantul Regency became a public actor in providing crisis knowledge, especially in the era of emergency PPKM 3-10 July 2021. The results of the interview with Pusdalops Manager, BPBD Bantul Regency have used crisis knowledge as one of the indicators of crisis communication in emergency PPKM”. The interview data is then presented with Nvivo

12plusd software with a crosstab analysis feature described as follows.

Picture 1.

Result of Crisis Knowledge



Source: Processing by Author using Nvivo 12plus

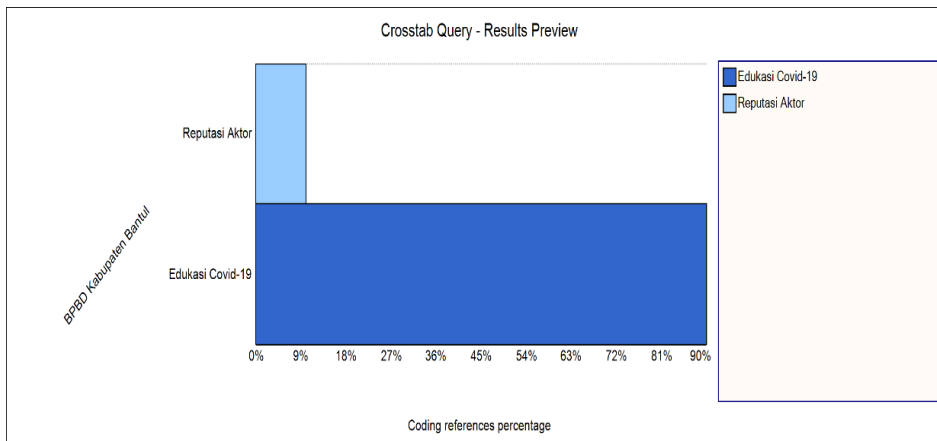
In this case, crisis knowledge built by disaster management actors, when viewed in graph 1, shows that COVID-19 education has the highest intensity of 86% of the actor's reputation, which is 13%. This shows that BPBD Bantul Regency has been by and in line with the concept of crisis knowledge that prioritizes COVID-19 education rather than public reputation. In COVID-19 education, BPBD Bantul Regency has several activities, such as the presentation of daily COVID data and providing socialization with disaster management communities. This is also not only done by BPBD but also collaborates with all elements, both government and non-government. The education is certainly manifested through social media platforms @PusdalopsBantul to accelerate the spread of information related to COVID-19. The community will be more receptive to various information about COVID-19 through social medicine. In @PusdalopsBantul, all information related to COVID-19 education is also stimulated in various information such as Health Care Education, directing the public to their websites and landing pages to obtain information about covid-19, the latest and most trusted Healthupdates, provide services regarding healthcare care, and posting in the case of Covid-19.

“In addition, in returning the reputation of actors, BPBD Bantul Regency moves together with several elements such as the Disaster Risk Reduction Forum (FPRB) and volunteers to synergize in socializing with the

community in terms of COVID-19. This is done because in a crisis situation various public actors need to have crisis management while maintaining their image to the public (Indrayani, 2017). The goal to be achieved is to gain public confidence in the performance carried out by BPBD Bantul Regency in tackling COVID-19. These events or events occur when the public no longer believes in public actors. In the Bantul Regency itself, the event occurred in community groups that do not believe in COVID-19 by performing actions such as conducting funerals independently without protocol. Health and not isolation or quarantine. BPBD Bantul Regency, as a disaster management actor, responded by socializing the two events, and the community became aware of the importance of maintaining self and the surrounding environment from the dangers of COVID-19. Even some community groups that previously conducted funerals independently without health protocols are now even appointed as funeral ambassadors by BPBD Bantul Regency. To be a pilot material for regions or other areas to always care for themselves and the surrounding environment in tackling COVID-19”.

Ncapture social media dimension through @PusdalopsBantul, BPBD Bantul Regency seeks to improve public knowledge by building crisis knowledge during ppk. From the results of the crosstab analysis, it can be known that the intensity of education covid-19 shows the highest percentage of 90% compared to the public reaction of only 10%. BPBD Bantul Regency carries out crisis knowledge built through COVID-19 education by spreading the narrative on the development of COVID-19 case data. While in public reputation, BPBD Bantul Regency only conducts logistical assistance to all Kalurahan in Bantul Regency with FPRB and campaigns for the Bantul narrative against COVID-19 to be more harmonious and prosperous. This is inversely proportional to the narrative of crisis knowledge delivered by Pusdalops BPBD Bantul Regency, which said that COVID-19 education involves all elements to overcome COVID-19. However, the narrative conveyed through social media @PusdalopsBantul only displays data on the development of COVID-19. The reputation of BPBD actors also only campaigns a bantul narrative against COVID-19 and, together with the FPto, provide logistics only, without narrating the events or events of the community who try to reject health protocols and do not believe in the existence of COVID-19.

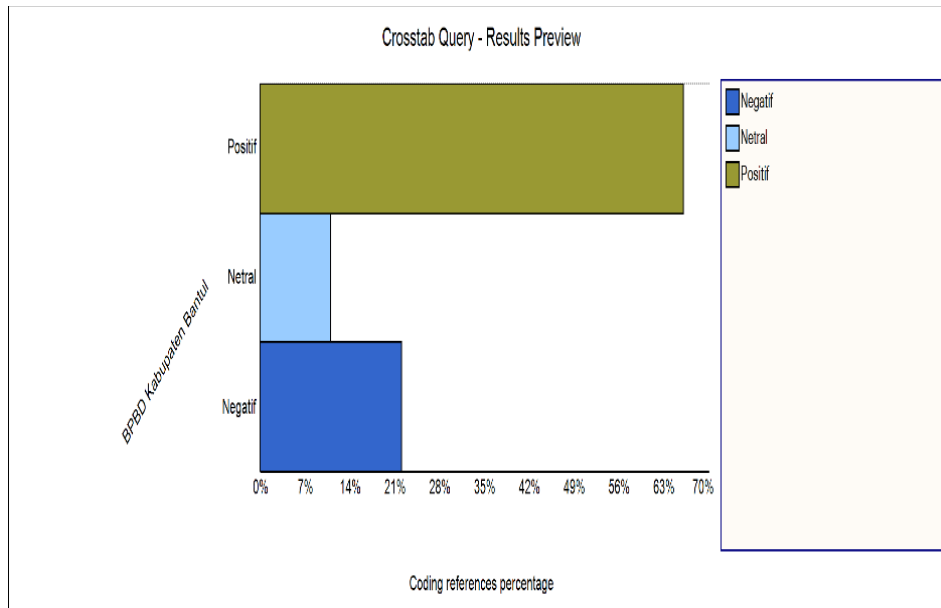
Picture 2.
Result of Crisis Knowledge



Source: Processing by Author using Nvivo 12plus

Public interaction in social media is obtained through participation virtually (Azeiteiro et al., 2015). Social media is one of the forms of communications, a means to channel thoughts and thoughts that are positive and neutral on the topic (Friedl et al., 2019). The three teams expressed users' minds with positive, negative, and neutral tendencies. In the pusdalopsbantul account, all public sentiment can be seen from the results of crosstab analysis, with the highest dominance in positive sentiment with a percentage of 66%, negative at 21%, and neutral at 11%. Positive sentiment arises because of some constructive public thoughts that support BPBD Bantul Regency in efforts to combat COVID-19. This is reflected in the public segmentation that provides some appreciation, especially in BPBD Bantul Regency in tackling COVID-19. In Narasi, a negative tension also appears as an attitude that does not agree with the information provided by BPBD Bantul Regency; for example, some people do not believe COVID-19, especially in the data presented by BPBD Bantul Regency, and some of them perform funeral rejection actions by protocol kesehatan. Also, neutral sentiment appears as an expression that tends not to side with any group. This community tends to agree with various information from BPBD Bantul Regency. More details can be seen in the following picture: 3

Picture 3.
Result of Public Interaction on Comment



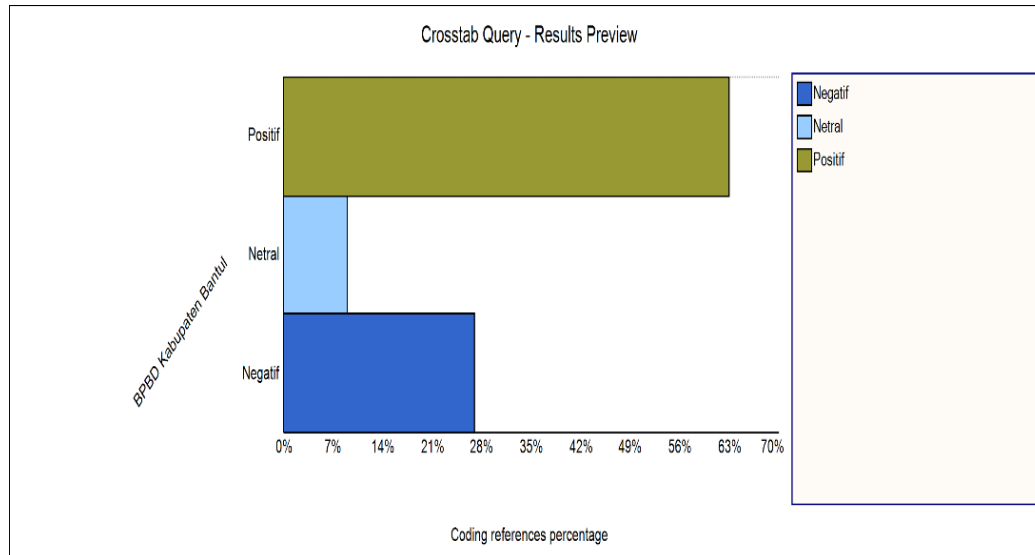
Source: Processing by Author using Nvivo 12plus

In addition to the comment feature in social media, Twitter public interaction can also be seen from retweet activity to public interaction in the form of sentiments that are positive, negative, and neutral (Rath et al., 2018). Such attitudes or sentiments can be expressed directly by doing opinions or thoughts and retweeting certain information. From the results of crosstab analysis, graph 3 shows that in the social media dimension of Twitter @PusdalopsBantul, retweet activity shows the highest intensities in positive tendencies 63%, negative 27%, and neutral 9%. In a positive sentiment, the public response tends to behave in a supportive and constructive direction in the steps of BPBD Bantul Regency in winning covid-19 by giving a positive response to any information presented by BPBD Bantul Regency. The public also tends to have an opinion on the tendency of the performance carried out by BPBD Bantul Regency to overcome COVID-19. Then, on negative sentiment, the public responded with a distrustful attitude to the COVID-19 data presented through @PusdalopsBantul. The response conveyed by the community on the negative sentiment appears in the presentation of data on COVID-19 case updates presented per existing village. The Bantul Regency is divided into the distribution zone of COVID-19. And lastly, the public's neutral sentiment chooses silence and is impartial from both sides of the sentiment. The

neutral attitude is poured on the tendency of opinions that tend to follow the information presented by BPBD Bantul Regency and are not involved in discussions. About the presentation of COVID-19 data and information.

Picture 4.

Result of Public Interaction on Retweet



Source: Processing by Author using Nvivo 12plus

Word Cloud Analysis is used to acquire a growing narrative on social media. It can be seen from 50 famous words about crisis communication built by BPBD Bantul Regency.

Picture 5.

Result of Word Cloud Analysis



Source: Processing by Author using Nvivo 12plus

Crisis communication during the Emergency PPKM conducted by BPBD Bantul Regency from Nvivo 12plus Word cloud Analysis found popular words from the study with findings regarding the general picture of crisis communication built. The analysis results found 50 words that are most often used in discussions

from the chairman of Pusdalops BPBD Bantul Regency and social media data. The study findings showed that the built crisis communication showed the highest intensity in terms of COVID-19 education and was accompanied by high public engagement and positive response. The discussion results showed words that dominate, such as Bantul, by 31 counts. Discussion on the use of the word Bantul is intended as an integral part of the efforts of Bantul Regency itself to overcome COVID-19 narrated from the district. In addition, there are data words 29 count, COVID 24 count, district 21 count, PPKM 20 count, and other words that are the subject of discussion in the COVID-19 narrative. The discussion has an interrelated correlation with building the COVID-19 narrative in the era of Emergency PPKM.

CONCLUSION

Three points can be concluded, namely: 1) in the crisis knowledge indicator, BPBD Bantul Regency has successfully built a public understanding of crises. This is evidenced by the highest node results in COVID-19 education at 86% and dominates rather than the public reputation of only 13%. However, the narrative of crisis knowledge built by Pusdalops BPBD Bantul Regency is not informed. And in the dimension of social media that only chooses covid-19 data without displaying the collaboration of actors and socialization of BPBD Bantul Regency in socializing to communities that are less segmented. believe2) In indicators of public interaction in the public comment feature respond with sentiment that tends to be positive with an intensity of 66% on the activities and constructive attitudes of the community in efforts supporting the role of BPBD Bantul Regency in tackling covid-19, negative 21% namely in public opinion that rejects the information provided by BPBD Bantul Regency and does not believe on covid-19, and neutral 11% which is an impartial attitude from both sides. In the positive sentiment, the retweet feature also still dominates as evidenced by the results of crosstab analysis of 63% on public opinion activities that support all data and information BPBD Bantul regency, negative27% with a tendency that appears in public distrust of the data and information provided by BPBD Bantul Regency, and neutral 9% which is an impartial attitude on the two discussions. 3) In word cloud analysis, the dominance of words often used as narratives is Bantul with 31 counts, followed by the word data, covid, PPKM district, and so on. The study also has

limitations because it only looks at data from social media. Twitter only looks at two perspectives, namely crisis knowledge and public interaction. The recommendation for future research is to try to know the knowledge of crises and public interactions on other social media such as Facebook, Instagram, and others while seeing them in a wider range, not from a regional perspective.

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