

# Social Media Used to Spread Vaccination Program: Case of Indonesia Vaccination Covid-19 Policy

Danang Kurniawan<sup>1</sup>, Arissy Jorgi Sutan<sup>2</sup>, Ilham Mufandi<sup>3</sup>,  
Eko Eddy Supriyanto<sup>4</sup>, Meida Rachmawati<sup>5</sup>  
Masters Government Affairs Administration, Universitas Muhammadiyah Yogyakarta<sup>1,2</sup>,  
Indian Institute of Technology, Delhi<sup>3</sup>, STKIP NU Tegal<sup>4</sup>, Universitas Ngudi Waluyo  
Semarang

{kurniawand949@gmail.com<sup>1</sup>, arissyjorgisutan7@gmail.com<sup>2</sup>}

**Abstract.** On 13 January 2021, the Indonesian government announces the Vaccination program in Indonesia; social media, especially Twitter, also tend about the Vaccination Program. This research aims to know what social media has been used about the Vaccination Policy in social media Twitter. This research uses a qualitative approach, which uses Q-DAS (Qualitative Data Analysis Software) to analyze it. The toll of analysis using Nvivo 12plus and using 9 Hashtags that relevant to the topic. This research found that: 1.) The topic of Vaccination Policy dominated with Vaccination narration with result 51,62%. 2.) There also appears the relation of all those hashtags with quite a strong relationship; the highest point is 0,809096. 3.) Popular word in this phenomena is using hashtags like #vaksinasidimulai. The limitation of this research is only using hashtags data in the analysis. Recommendations another research that take the same theme can use digital data.

**Keywords:** Vaccination program; Covid-19; Social media

## 1 Introduction

In the year 2020, the Corona Virus Disaes or Covid-19 become pandemic and affect many countries in the world. The desires affect world health its also can increase mortality because of the Covid-19 [1]. To reduce the mortality from the Covid-19 its urgent to make the vaccine as soon as possible [2], [3]. At the beginning of 2021, Indonesia's government tries to start the vaccination program to reduce the pandemic effect. Using COVID-19 vaccines would significantly reduce current disparities and the overall disease burden due to COVID-19 [4]. The vaccination program in Indonesia has also become trending in Twitter trends Indonesia. In this case, we can see that netizens in the social media twitter also care about public issues like the Vaccination program in Indonesia.

### 1.1 Social Media and Policy

Social media has become extensive media, and it is cheap and easy to access. Besides, new media such as social media should also be discovered. I try to encourage a target group to shift

of these ideologies; campaign messages should incorporate data and expert viewpoints [5]. Horowitz and Kaldy suggest there are some recommendations as a guideline for social media development in political aspects like [6]:

- a. The social media and political aspect should refer to the previous policy that related to social media.
- b. Social media practice should use common sense and general guidelines in political aspects, especially in the policy sector.
- c. Accountable for enabling selective posts where the facility is a topic of a subject matter.

Besides that, social media is the right platform to look at society's response about public policy: First, With large users show that social media can be the right place to rising voices about public policy in the region. Second, Social media gives society an option to giving voice [7]–[9]. Social media can also see as a platform to collect social power like Twitter and Facebook, allowing the activist and online campaign and using social media as a platform of collective communication [10]–[12]. Every media has a unique side, Like the social media that can use everyone to interact, discuss and giving voice about some event, but the social media can provide the freedom of speech, but at the same time, some users cannot distinguish between freedom of speech and social ethics [13]–[16].

## **1.2 Health Aspect and Policy**

Health policy is essential with the Covid-19 Pandemic situation. In this case, we need a policy that can afford that everyone has access to health. In this situation, policymakers should make the policy applied with high efficiency to reduce the Covid-19 Pandemic [17], [18]. For example, take a look at the china of vaccination program of Influenza. There are three points about health policy that should focus on three sectors: First, there should have a relation between management and policy related to the health sector. Second, society and the government should have an awareness of the health issue. Third, there must also appear intervention on accessibility and affordability [5], [19]. Like what Iran does to reduce this pandemic effect, some initiatives and regulations to vanquish the disease outbreak are being put in place as the virus rapidly reaches a deadlock. There is a need for rule induction, situational regulations, and efficient skills to mitigate this same infection in foreign nations is evident [20]. Another country also should help each other like the WHO (World Health Organization) told that the biggest takeaway from all of this is that while every other government can have its specific operating structure, regulation, as well as cultural identity, this same worldwide dissemination, including its COVID-19 pandemic has had no geographical boundaries. States to earmarked distinctions to exchange information and collaborate to handle an urgent worldwide epidemic are essential [21]–[25].

## **1.3 Social Media and Rising Voice**

Social media become the media to shows the voice of society. In this case, social media is a platform to respond to the vaccination program that happened in Indonesia. Social media has changed the protest that happened with conventional to digitalize more using social media. Social media change society to be the brave rising voice by using social media as the platform. On the other's side, the netizen uses hashtags to make up the voice became the trend. Many movements and protests happen using social media as a toll, like what happened in the middle east during Arab spring [26]. Communication and interaction between many demonstrations

activism throughout the Arab spring regions have recently become more robust. This also appears to have overridden its founded significant news outlets such as Tunisia, Egypt, Syria, and Yemen, when they should have been going through the instability. Authoritarian governments in both those nations had already forgotten flow with data and internet content detailing their corrupt activities, violations of human rights, as well as an end to civil liberties. Demonstrators within and without particular areas now use Facebook, Twitter, and YouTube as sites instead of free information circulation, which has been left entirely unscathed [26]. The most popular used in social media are using hashtags to share the content and rising voice to be trending social media Issues linked to equal political justice, and challenging infractions of voice in establishment media have arisen from the recent usage of hashtags such as #BlackLivesMatter, #GirlsLikeUs, and #SayHerName [27], [28]. On the other side, the social media used, there some point that protestors could still benefit from using online platforms to increase their exposure. Even so, new media and aid corporations like to mute their critiques by giving them the ability to control with their exposure. The latter causes specular highlights in which company people take an unfair advantage because protestors exit alternate social networks [29]. Another challenge from the activist side, known as slacktivism and the instant public, is that instant activism can generate both the hot-issue public and slacktivists. The reason for slacktivism because once individuals accept a media platform hoax, those who are even less likely to participate throughout the debate in the first place. It involves appropriate visual behaviors, like connectivity, making comments, and likeability social media posts, even though explained throughout the "Discussion" segment [30].

This research aims to know what kind of social media is used in vaccination Covid-19 policy in Indonesia; the previous research talks about the vaccination policy without seeing the social media impact. This research tries to see the social media used in Indonesia's vaccination policy to reduce the Covid-19 Pandemic. In this case, there are define three questions there are:

- Q1, What kind the social media topic or content that related to the vaccination program in Indonesia.
- Q2, What kind of social media relation of those hashtags in the Vaccination program's social media talks in Indonesia.
- Q3, What kind the narrative spread in social media about the vaccination issue in Indonesia.

## **2 Methods**

This research uses a qualitative approach, which uses Qualitative Data Analysis Software (Q-DAS) to analyze social media data. The toll that using to analyze the data is Nvivo 12Plus. To deliver the value and result using descriptive way, it also used table and figure to make clear the reader about the analysis parts. This research also using social media data using nine hashtags in the Twitter trend that relevant to the vaccination of the Covid-19 Program. in this case the 9 Hahstags are: #Vaksin, #vaksinasidimuali, #vaksinasimelawanpandemi, #VkasinasiNasional, #VaksinBiarTenang, #VaksinCovid19, #VaksinHalal, #VaksinSinovac, #vaksinuntukkita. The analysis parts using three analysis toll on Nvivo 12Plus: Chart analysis, Cluster analysis and Word Cloud analysis.

## **3 Result and Disscusion**

This part tries to know what kind the social media phenomenon about the vaccination policy in Indonesia. These parts using three kinds of analysis, there is Chart analysis to know social media topic or content that related to the vaccination program in Indonesia, Cluster analysis to know social media relation of those hashtags in the social media talks of the Vaccination program in Indonesia, and word cloud analysis to know narrative spread in the social media about the vaccination issue in Indonesia. The analysis parts in down below.

### 3. 1 Social Media Content about Vaccination Policy

This part tries to know what kind the content that spread on social media. using social media data specially using 9 hahstags there are: #Vaksin, #vaksinasidimulai, #vaksinasimelawanpandemi, #VkasinasiNasional, #VaksinBiarTenang, #VaksinCovid19, #VaksinHalal, #VaksinSinovac, #vaksinuntukkita. in this parts usng charts analysis which using 3 Nodes there are: Covid, Sinovac and Vaksinasi. The analysis parts in down below.

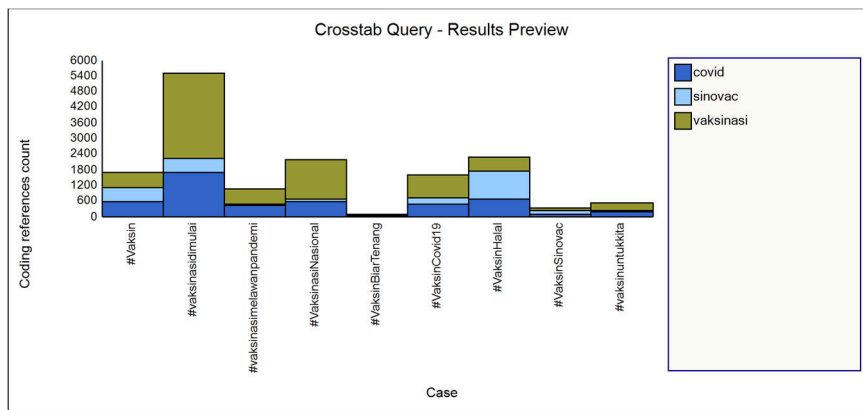


Fig. 1. Social Media Topic about Vaccination Program.

Table 1. Tablet Social Media Topic about Vaccination Program.

Hashtags	Covid	Sinovac	Vaksinasi	Total
#Vaksin	33,29%	31,79%	34,91%	100%
#vaksinasidimulai	30,45%	10,08%	59,47%	100%
#vaksinasimelawanpandemi	38,99%	2,94%	58,06%	100%
#VaksinasiNasional	27,2%	4,23%	68,57%	100%
#VaksinBiarTenang	35,09%	12,28%	52,63%	100%
#VaksinCovid19	29,82%	13,16%	57,02%	100%
#VaksinHalal	29,36%	47,23%	23,41%	100%
#VaksinSinovac	31,39%	33,66%	34,95%	100%
#vaksinuntukkita	29,28%	15,78%	54,94%	100%
Total	30,67%	17,71%	51,62%	100%

In this case, we can see that social media content; in this case, there are three social media content nodes: Covid, Sinovac, and Vaksinasi. In nodes of Covid, the highest pole is #vaksinasimelawanpandemi with 38,99%, in the second pole is #VaksinBiarTenang is 35,09%, the third place is #Vaksin is 33,29%. Nodes of Sinovac, the highest pole, is #VaksinHalal with 47,23%. On the second pole is #VaksinSinovac with 33,66%. In third place is #Vaksin with the result of 31,79%. Nodes of Vaksinasi, the highest pole, is

#VaksinasiNasional with a result of 68,57%. The second pole is #VaksinasiNasional, with a result of 68,57%. The third pole is #vaksinasidimulai with 59,47%. From the result's total result, the Highest result is the nodes of is Varanasi with 51,62%. The second pole of the total result is nodes of Covid with 30,67%. The third place is the nodes of Sinovac with 17,71%. From this case, we can see the social media used to fly up the vaccination program's topic.

### 3.2 Social Media Relation on the Vaccination Policy issue

This analysis parts using Cluster analysis to know what kind the social media relation. The analysis using 0,5 lower limit and one upper limit. In this case, social media is used as the platform to know the relation of those hashtags in social media. This analysis using the scale from -1,0, and 1 as a reference in the upper limit and lower limit. the analysis following is down below.



**Fig. 2.** Social Media Relation about Vaccination

Program. From the data, we can see that the relation of those hashtags we can see in 0,5 lower limit and the upper limit. the Highest relation is #VaksinSinovac and #VaksinCovid19 with 0,809096 score. The second pole of the relation is #VaksinCovid19 with #Vaksin, and the result is a 0,781341 score. The third place is relation #vaksinuntukkita with #VaksinCovid19, and the relation score is 0,756944. Fourth place is the relation of #VaksinCovid19 and #vaksinasimelawanpandemi, with the relation score is 0,750323. The Fifth place is the relation between #VaksinSinovac with #Vaksin, and the relation score is 0,749446. In this case, social media relation, we can see that the relationship appears and quite string because the relationship we can see in the 0,5 point lower limit and 1 point upper limit.

<b>Table 2. Top 5 Relation Of Hashtags in Social Media About Vaccination Policy</b>		
<b>Hashtags A</b>	<b>Hahstags B</b>	<b>Pearson correlation coefficient</b>
#VaksinSinovac	#VaksinCovid19	0,809096
#VaksinCovid19	#Vaksin	0,781341
#vaksinuntukkita	#VaksinCovid19	0,756944
#VaksinCovid19	#vaksinasimelawanpandemi	0,750323
#VaksinSinovac	#Vaksin	0,749446



- b. Social media has a relation; in this case, social media relation is quite strong that we can see the relation with a lower limit is 0,5, and the upper limit is 1 point. With the Highest relation is #VaksinSinovac and #VaksinCovid19 with 0,809096 score.
- c. The social media narrative that spared dominated with the single words; besides that, the hashtags also appear in social media talk with the highest word is Vakasin with the count is 18869.

From this point, we can see that tendency social media used to promoted the vaccination program. Using single words and hashtags and making the narration spread on social media can impact the netizen to participate in the vaccination program. The social media hashtags also show the relation that quite strong to look and indicated that those hashtags are connected with the same goals to promoted the vaccination program.

#### 4 Conclusion

Social media, in this case, using to promote the vaccination policy in the case of Indonesia. It can see from three-point that: *first*, social media topics or content define in three dominant topics like *Covid*, *Sinovac*, and *Vaksinasi*. The result is Highest result is the nodes of is Varanasi with 51,62%. The second pole of the total result is nodes of Covid with 30,67%. The third place is the nodes of Sinovac with 17,71%. From this case, we can see that social media used to fly up the vaccination program topic. *Second*, social media has a relation. In this case, social media relation is quite strong that we can see the relation with lower limit is 0,5, and the upper limit is 1 point. With the Highest relation is #VaksinSinovac and #VaksinCovid19 with 0,809096 score. *Third*, social media narrative that is spared dominated with the single words, besides that, the hashtags also appear in social media talk with the highest word is Vakasin with the count is 18869. The limitation of this research only focused on social media data to analyze this research. On the other side, the next research recommendation tried to use the digital data and focused on the pro-contra on social media in Vaccination policy.

#### Acknowledgements

Research journals related to vaccination policy communication express sincere appreciation to all reviewers for selflessly contributing their expertise and time to the review process, which is essential to ensure the journal's quality and substantive impact. Journal editors and co-authors acknowledge reviewers' efforts to evaluate and rate articles submitted for consideration.

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