Analysis of Vaccine Hoax Information in Facing the Covid-19 Crisis on Twitter

Muh. Syaiful¹, Muh. Akbar¹, Tuti Bahfiarti¹

¹Hasanuddin University, Makassar, Indonesia
*Correspondence: muhsyaiful95@gmail.com

ABSTRACT

Present the new media (internet) as a new challenged in the world of information, especially on hoax information. The increase in hoax messages has also been a challenge in managing the Covid-19 crisis, with social media becoming the new venue for the spread of hoax messages. The objective of the research was to analyze information on the Covid-19 vaccine on Twitter to be more careful in choosing and to reveal the disseminating information. This research used qualitative content analysis methods according to Philip Mayring and utilized the search engine on Twitter to collect data within a certain time span. The result of this research, found some hoax information on Twitter such as: Sinovac vaccine was haram, vaccine was killed, vaccine was spayed, and vaccines changed human DNA.

1. Introduction

The presence of new media and the increasing level of community adoption have a significant impact on the dynamics of their social life. The new media discussed here is that digitization has enabled a variety of new communication technology tools and their widespread availability as a means of communication for personal use (McQuail, 2011). Seen from the large number of users, Indonesia occupies a position as one of the countries with the largest number of internet users among other countries. Internet as a social network was a new intermediary with various features available in it. In practically every region in the world, the Internet has just recently been widely available. Social media has had its own impact on the activities of people today (Gentina et al., 2021; Rahman, 2019). As we all know, social media is an online platform where users may engage in information gathering, communication, and friendship utilizing all the tools and services they have available, including blogs, Facebook, Twitter, Instagram, and others (Rahman et al., 2019).

Internet, social media, and multimedia technology into a single unit that was difficult to separated and encourage the creation of new things. Now days, everyone can easily find any information they want. Furthermore, the number of users’ social media like Facebook, Twitter, Instagram, and others was a new medium that allows people to communicated and shared with friends and even with other people who have social media accounts. In line with that, the effect of social media development is one of place spread hoax (Belinda, 2020). New types of media that have sprung up in society can change the spectrum of possibilities about socio-technology that has an impact on public communication. The number of emerging social media such as Facebook, Twitter, Instagram, and others are new media that make people able communicate and share with friends even with other people who have social media accounts (Shane-Simpson et al., 2018; Hamuddin et al., 2022). Since the society must be able to filter which ones are feasible and it is not feasible to use wisely.

There are 160 million active social media users in the We are social 2020 report. One of the most actively used social media platforms was YouTube 88% of the total users, WhatsApp 84%, Facebook 82%, Instagram 79%, and followed by Twitter 56% (We Are Social & Hootsuite, 2020). Twitter was one of the social media platforms that were often used in Indonesia. Twitter’s, with several topics trending, including the question of a Covid-19 vaccine. The most readily observable phenomena are confusions of ideas, opinions, and superficial ways of thinking. On the other hand, it is also easy for society to trust all the information presented on the Internet. It provides space for communication and interaction in social networks and facilities on social media are very diverse. On Twitter itself, users can tweet/write statuses that related to what is experienced and responses to situations that are developed. In addition, on Twitter, it can
follow what issues are currently hotly discussed. It is a place for users to gather, communicate and voice their opinions on various issues that develop in society.

In the guise of information exchange, modern life has given us a lot of venues for gossip and hearsay. Social network services, micro-blogging, and other forms of social media have all had a significant impact on the gossip. However, because information spreads from people unabatedly, these customer-driven media are vulnerable to hoaxes and lies (Maulana & Situngkir, 2010). The hoax phenomenon is closely related to the development of very fast information technology. For instance, the audience-media relationship has evolved as a result of new media. Various New media platforms have emerged which are popularly called social media and it has made audience and media relations are in interactive relationship. Shift in audience characteristics offline as a connoisseur or consumer of information (passive object) becomes online audiences (netizen) who play the position of consumers at the same time producer of information itself (active subject).

Despite being fake, contrived, or exaggerated to the point where it no longer correlates to reality, a hoax is portrayed as being true to life (Reilly, 2018). Having access to so much information and finding it so quickly on social media make people anxious because some of it is useless or deceptive, which encourages the spread of hoaxes (Yoedradi & Adina, 2021). Even though all the information presented on the internet is made by humans from various backgrounds with various motives, subjectivity, levels of thoughts, knowledge, level of education, culture, and so on which do not guarantee the truth. But why does society easily just trust it. A hoax is a message intended to disguise an actual message (Tchakounté et al., 2022). In other words, hoaxes can also be interpreted as attempts to misrepresent the truth using persuasive but unverifiable supposed information. Hoaxes too interpreted as an act of obscuring the actual information, by flooding a medium with the wrong message in order to be covered up the true message (Susilo et al., 2020). The purpose of the intentional hoax is to make people feel unsafe, uncomfortable, and confused. In the confusion, society will take weak, unconvincing, and even wrong decisions (Sellnow et al., 2019). The development of hoaxes on social media is a challenge facing the era of open information as it is today.

Based on Danarka Sasongko, a teaching staff in communication at Atmajaya University in Yogyakarta, people still cannot distinguish what is right from what is not. In his view, this is due to low public education on journalism on social media (Sawitri, 2017). According to Budi Sutedjo, media literacy is the capacity of readers to monitor, assess, and rewrite the information they consume. Besides that, according to information technology (IT) specialists at Yogyakarta's DutaVakana Christian University, can stop the spread of hoaxes (Novaldi, 2017). The growth of information is inequitably matched by low literacy. The disorder of perceptions, opinions, and shallow mindsets is the phenomenon that is the simplest for us to notice. On the other side, society also so readily accepts any piece of information found online.

As Twitter has unique community structure (Maulana & Situngkir, 2010), There are some functional distinctions between word-of-mouth in conventional social networks and the way rumors or gossip (Lind et al., 2007). Interestingly, as an online service, news travels much faster in space and time. Information is important from social media, including Twitter. Information becomes a commodity in the information society. The information is in producing, distributed, as well as consumed by audiences so that information is a valuable commodity.

In 2020, the huge and intricate effects of the Covid-19 pandemic shook Indonesia and the entire planet. This country faces a problem that affects everyone in the world. The first outbreak of the disease was reported in late 2019 in Wuhan, China. The disease then spread to practically every part of the globe. There is now a Covid-19 emergency in Indonesia (Syatar et al., 2021). One strategy to combat Covid-19 is vaccination, but the reports of hoax communications have made people afraid and anxious about getting their shots (Sulistyanto et al., 2022).

There is now a Covid-19 emergency in Indonesia. The Covid-19 pandemic and its effects must be defeated through more serious, systemic, and large initiatives, one of which is immunization or vaccination (Syatar et al., 2021). The reduction of Covid-19 transmission, cases, and fatalities as well as the development of herding communities are among the goals of immunization. But there have been both positive and negative reactions to the vaccination campaign in the neighborhood (Rachman & Pramana 2020). Not everyone in a society supports vaccination. Muslims who object do so for theological reasons. Additionally, the group objected to vaccination (Mut'ti, 2021).

There was a discussion, and there are still two sides that disagree with it. Proponents believe that vaccination is the Indonesian government's best effort to give citizens a sense of security and a defense against the spread of Covid-19. Since the effectiveness of vaccination has not been proven, the argument against it claims that negative effects may result (Syatar et al., 2021). Credibility issues arise towards citizens in new media. Freedom in managing information you want to be published, freedom in inserting opinions into the information written down to the various media, no rule out
the possibility that there are indications of partisanship of the residents. Especially the internet allows anyone to construct a different identity to hide information.

According to Tempo data, on March 3, 2021, the Ministry of Communication and Informatics captured 667 URLs suspected of spreading hoaxes (Francisca, 2020). Hoax messages related to Covid-19 do not convince people that the virus exists, especially the vaccine. There is also the possibility that hoax discourses could interfere with reasonable thought (Brughemann et al., 2020). Using social media, the bogus information can be widely disseminated (Assiroj et al., 2018). Due to the numerous hoaxes that are being circulated on social media, particularly Twitter, people are concerned about getting vaccines.

![Image](image.png)

**Figure 1. @saveindonesia20**

These Phenomena were very troubling if they were disseminated and fatally, there would be distrust of the Covid-19 vaccine. The hoax information related to the Covid-19 vaccine on Twitter social media leads public opinion so, people don't believe in the vaccine. In fact, the number of Covid-19 sufferers was increasing every day and the decision of the Majelis Ulama Indonesia (MUI) as related in determining whether the vaccine was *haram* or *halal* said that the Sinovac vaccine was saintly and halal. This was the power of the social media, sometimes there was often a conflict of demands between profits and the services that were operate (Baran, 2012). Social media is also used as a source of information (Kholit & Nastain, 2020). Not infrequently the issues raised were controversial, hoaxes, and so on for the benefit of one side. Information circulated within the community should be verified information. The material must be extracted from numerous reliable sources and thoroughly searched in order to establish the facts. The source of the media material and the actual media content are the two most important factors in the review process.

2. Methodology

This research used qualitative methods. Krippendorff (2018) defined content analysis as an in-depth analysis using either qualitative or quantitative techniques (Emsir, 2016). There are many different methods of interpreting text. Each with advantages and disadvantages. As a method, content analysis has deep intellectual roots very long. This method used by experts in many fields, such as philosophy, religion, politics, and rhetoric to language, art, sociology, anthropology, communication, and psychology.

A scientific method for determining the meaning of text or material is content analysis. According to Krippendorff (2018), content analysis is a method of conducting research that may be used to deduce the meaning of a text using methods that are trustworthy (reliable), reproducible or applicable in different settings (replicable), and legal. The definition's text is restricted to written works, but it also includes other meaningful objects, such as pictures, maps, sounds, and symbols, as well as other written works. The presence of the internet provides opportunities and challenges in the field of research for researchers who specialize in media content. Internet media even provide a new and broad research area for research content or media content, for example on Facebook pages, online advertisements, display, and layout on Twitter, photos on Pinterest or Instagram, to videos on YouTube. Using content analysis is helpful in cyber media because of this search engines and the character of the new media itself work by storing data electronically.

All kinds of communication, including those in newspapers, books, films, etc., can be analyzed using this strategy. The steps are as follows: There are many different methods of interpreting text. Each with advantages and...
disadvantages. One of them is Content Analysis, or commonly known as content analysis is a method. As a method, content analysis has deep intellectual roots very long. Even referred to as the oldest method of interpretation.

![Research Method Diagram](image)

**Figure 2. The Steps of Qualitative Content Analysis According to Philip Mayring (Emsir, 2016)**

### 3. Result and Discussion

Data analysis was done based on the discovery of hoax information on the Covid-19 vaccine on Twitter in order to explain the research's findings. From the 403 tweets research, there were several tweets that were indicated as hoaxes. There were several categories of hoax information regarding the Covid-19 vaccine as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Category of Covid-19 vaccine hoax</th>
<th>Total</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sinovac Vaccine Haram</td>
<td>6</td>
<td>1,5%</td>
</tr>
<tr>
<td>2</td>
<td>Vaccine is kills</td>
<td>8</td>
<td>1,9%</td>
</tr>
<tr>
<td>3</td>
<td>Vaccine is spay</td>
<td>2</td>
<td>0,5%</td>
</tr>
<tr>
<td>4</td>
<td>Vaccine change DNA</td>
<td>1 Video</td>
<td>0,2%</td>
</tr>
</tbody>
</table>

Firstly, the Sinovac vaccination is currently trending on Twitter and among Indonesian internet users. Six tweets that claimed the Sinovac vaccination was haram were reported as hoax. These six tweets are not supported by trustworthy sources or transparent data. The six tweets lacked reliable sources and precise information. As information, the Sinovac vaccine is one of the vaccine types the Indonesian government ordered. The first time, arrived in Indonesia, the Sinovac vaccine became a hot topic of conversation. Among netizens, including on Twitter and social media, especially issues about the halal-haram Sinovac vaccine.

According to Joy Fanra who also retweeted the Smart Opposition Media @OpositionCerdas about the MUI: Sinovac Has Not Completed the Covid-19 Vaccine Halal Document. The @FanraJoy account shared a tweet from @OppositionCerdas concerning MUI: Sinovac has not yet finished Covid-19 vaccine halal document to support the contention in the tweet. However, the halal certification process requires the filling of several documents. Majelis Ulama Indonesia (MUI) fatwa on sacred and halal Sinovac vaccines based on plenary meeting (01/08/2021). To respond to
public unrest over the many confusing information as well as the amount of hoax information about the illegality of the Sinovac vaccine circulating on social media, especially on social media Twitter.

Basically, the account is trying to interpret what is the source of information from the account. In addition, the account @JanganJender says that if unclean elements are found at a later date, he suggests dissolving the Majelis Ulama Indonesia (MUI). As it is known The Majelis Ulama Indonesia (MUI) is the authoritative institution issuing halal certification for a product, be it food as well as drugs. More, a @PanraJoy tweet on January 8, 2021, seems to question the halal condition of the Sinovac vaccine. On tweets previously related to the issue of the vaccine process only pays attention to headline without seeing the contents of the news. Meanwhile, on the account @von_edison ordered Mr. Jokowi, ministers, and advisers.

The story also supports the vaccine's use of prohibited ingredients produced in communist China. China is a country that 68 manufactures the Sinovac vaccine and the vaccine has been ordered by the Indonesian government to overcome the Covid-19 pandemic. The tweet excerpt up top questions the Sinovac vaccine's halal certification. On occasion, people on Twitter make claims about the Sinovac vaccination being haram without supporting them with facts or credible sources. For example, the @saveindonesia20 account tagging @BimaAryaS said that in the end the vaccine Sinovac is illegal and the pandemic is part of the propaganda for destroying their own country. Distrust of the pandemic to implications for the Covid-19 vaccine. A related organization known as Majelis Ulama Indonesia (MUI) has the power to certify any good, including food and medication, as halal or haram. The researcher was unable to locate a fatwa from Majelis Ulama Indonesia (MUI) declaring that the Sinovac vaccination was haram.

Secondly, vaccine was killed, the information circulating on Twitter causing fear and distrust of the vaccine. Researcher found eight tweets stating that vaccines can kill. As an information, that the government has ordered various types of vaccines including; The red white vaccine, AstraZeneca, Sinopharm, Moderna, Pafizer, and Sinovac vaccine. The institutions in Indonesia that have the authority to examine were the Food and Drug Supervisory Agency (BPOM).

According to @SlamB17 said that Jokowi did not want to be in the first vaccine. So that the account assumes that Jokowi is the one that is the President does not want to be vaccinated, let alone want to be tested by the Indonesian people. Further, the account says that this is a trap for the regime and China to kill the people of the country The Unitary Republic of Indonesia (NKRI) slowly through syringes.

For example, the account @NopanPolapa2 stated that corona issues are not succeeded in killing than tried by way of vaccines. Besides that, its account also claims that covid-19 is only a contrived disease. Please note that before the vaccination process is carried out, then an examination is carried out on a person who will be injected with a vaccine. So that the health workers will assess whether a person is eligible for the vaccine. Too scared too appeared on account @V885J1F97cQ6P1T, so questioned whether the vaccination process should not be killed to the extent of mass killing.

Besides that, the account @Zulkiif16605089 says that the purpose of the vaccine is to kill humans drastically, especially the Islamic community based on agenda 21 of the United Nations 2030 the world population must be reduced. Account They think that Covid-19 is only a disease that is diagnosed by makeup. Now they are trying with a vaccine. Weird again, the account @MustafaKamalNu5 related the issue of viruses and vaccines with the bomb incident that hit Sarinah Jalan Tamrin Jakarta. The account says the coronavirus was created by China with the goal to kill humans and then create a vaccine for physical endurance. In addition, the account also uploads a picture.

There are so many unsubstantiated accusations against vaccines covid-19. Starting with the claims that the vaccine and the covid-19, it has the same group of killing humans, especially Moslem people. The next account @sumoburloff stated that the vaccine in Europe was rejected and the vaccine has killed fifty-nine people in Korea and Brazil. Various claims against the information are not proven and there is no reliable source of information credibility of the claim. So, it has an effect of fear and distrust of the vaccine. In other that, according to @davissoomn that vaccine was used to kill people. There are two tweets from @MustafaKamalNu5. The tweets say that what Communist China is doing is not good for Indonesia. China failed to kill humans by creating the coronavirus and now kills slowly via injection mode. Statement The tweet above questions the safety of the vaccine injection process, and one of the effects of the vaccine is to kill humans slowly. In addition, this account does not believe in vaccines, especially vaccines from China, because they can kill humans slowly. The account @MustafaKamalNu5 has tweeted several times regarding the covid-19 vaccine.

Third, vaccines can spay was one of the hoax information that was also circulating on Twitter. The researcher found there were two tweets that stated that vaccines could affect a person's process of getting offspring. For example,
in the account @cyberkopipahit who refuses to be vaccinated by Sinovac because it can be causing spaying as well as in the @Meisa83 account. They upload that tweet accompanied by emoticons/laughing tones. This is information classified as hoax information with satirical content.

Fourth, Vaccines can change human DNA. In the videos circulating on Twitter, someone talked about the effects of the vaccine, including changing human DNA. Even though, the person was not an expert in the field. The information circulating was not based on credible sources. The criteria for information sources according to Alzedan, (2019) information must be relevant, credible, useful, and the process of creating, and updating the source of information. Same with that, The Press Council also put forward the criteria for hoaxes, including the lack of clarity on the source.

4. Conclusion
This research allows us to distinguish which information is false and which is true, especially in relation to Covid-19 vaccines. Think critically and scrutinize any information you receive, especially from social media, before disseminating it. Therefore, the information received is credible and understandable. It shortcomings of this research were limitations in data collection and there were facts that emerge after six months of data collection, this was a shortcoming of this research.

References


