The semiotic and modern hermeneutic review of the online Covid-19 public service advertisement texts

I Gede Astawa*, Ida Bagus Gede Upadana, A.A. Sagung Ayu Srikandi Putri

Denpasar Academy of Tourism, Denpasar, Indonesia

Manuscript received September 11, 2022, revised October 26, 2022, accepted November 13, 2022, and published online May 7, 2023.

Recommended APA Citation

ABSTRACT

The Indonesian government works closely with other agencies to intensely campaign for the movement against the virus corona in various ways, one of which is through Public Service Advertisements (PSAs). PSAs have verbal and non-verbal elements that contain meanings, both explicit and implicit meanings. This article aims to analyze three samples of PSAs concerning Covid-19 retrieved from three online website media, namely (1) the website of the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia; (2) Republika online; and (3) Kompas.com. This research was conducted using qualitative descriptive methods referring to the semiotic theory developed by Roland Barthes and Charles Sanders Peirce, and the modern hermeneutics theory developed by Paul Ricoeur. The analysis of the PSAs in this study was focused on verbal texts, while non-verbal texts were not analyzed deeply. From the three PSAs analyzed, the study found that the explicit meanings lying in the PSAs were to fight the coronavirus by complying with health protocols. Meanwhile, implicitly, the PSAs imply that the Indonesian people are under threat of death, the coronavirus is not a lie, nor is it a conspiracy.

Keywords: Public service advertisements; Covid-19; Semiotics; Modern hermeneutics

*Corresponding Author:
I Gede Astawa
Denpasar Academy of Tourism, Denpasar
Jl. Tukad Balian No.15, Renon, Denpasar Selatan, Kota Denpasar, Bali 80239, Indonesia
Email: gedeastawa@akpar-denpasar.ac.id
1. Introduction

The presence of Coronavirus Disease 2019 (known as Covid-19), which has spread worldwide, has caused a global economic downturn. Since the spread of this virus to Indonesia, this deadly virus has devastated the economy massively. The lockdown policy and the implementation of restrictions on community activities resulted in massive layoffs between employees and companies/industries that provide job opportunities. Therefore, the unemployment rate has increased sharply, especially among those who work in private companies. It is indeed a difficult choice made by the government considering the chain of the spread of Covid-19 still cannot be overcome optimally.

Amid the government's efforts to break the chain of the spread of Covid-19, negative issues have developed in society, in which Covid-19 is a fabrication and conspiracy. The presence of social media which is growing rapidly in society provides fast access to both actual news and unactual news. It is undeniable that this kind of condition can be used as a tool by government opposition groups to form negative opinions that are easily spread on online social media. With the development of issues that doubt the existence of Covid-19, the government is aggressively campaigning for awareness of the coronavirus through various media (Hoed, 2014) one of which is through Public Service Advertisements (PSA). In general, these PSAs use verbal and visual language. PSAs are considered capable of mobilizing community solidarity when facing a social problem (Tinarbuko, 2017).

There are some relevant studies conducted by previous researchers (e.g. Al-Ghamdi & Albawardi, 2020; Leone, 2021; Lestari, Simarmata, Sitorus, & Sidabutar, 2021; Nuraryo, 2020; Putri, 2020; Riaz, 2020; Sulatra & Eka Pratiwi, 2020; Trisnayanti Ni Made Desi, Desak Putu Eka Pratiwi, & Komang Dian Puspita Candra, 2021). In general, the studies done by the previous researchers revealed denotative and connotative meanings implied in the texts. Mostly, the meanings lying in the texts tell us about togetherness in fighting Covid-19, staying at home to prevent the spread of Covid-19, fear of facing Covid-19, reducing the spread of Covid-19, radical cultural change, etc.

Theoretically, the semiotic theory developed by Roland Barthes and Charles Sanders Peirce has close to the modern hermeneutic theory developed by Paul Ricoeur (Hoed, 2014). By combining semiotic and hermeneutic theories in the analysis of the PSAs text under investigation, the study is able to uncover hiding meanings more deeply. The inclusion of hermeneutic theories is to enrich the understanding of the hidden meanings lying in the texts under investigation. Thus, this inclusion of hermeneutic theories, in this study, becomes a theoretical gap. The theoretical gap is the type of gap that deals with the gaps in theory with prior research (Müller-Bloch & Kranz, as cited in Miles, 2017).

In this study, the texts contained in PSAs are not only interpreted from their denotative meanings but also interpreted from their hidden meanings lying behind the texts. Thus, this present study aims at finding explicit and implicit meanings lying in the
three PSAs analyzed using the semiotic theory developed by Barthes (1957); Peirce (1940); and the modern hermeneutic theory developed by Ricoeur (1982).

2. Literature review

2.1. Advertisement

Advertising is a means of information that has elements of art. Therefore, advertising design always uses certain techniques to achieve its goals, namely (1) selling ideas that are the mainstay of the implementation of a product or service for the long term; and (2) dissemination of ideas regarding the benefits of the communicant when receiving the idea as recommended by the communicator, in the form of the use of the suggested goods or services, as well as the enjoyment derived from the use of the said goods or services (Tinarbuko, 2017). Furthermore, Djamereng (2018) states that the presence of advertisement is not only promoting a product but also indirectly presenting and offering an imagination. Promoting the product is also based on an ideology attached to the advertisement.

In general, advertisements are divided into two types, namely commercial advertisements and public service advertisements. A commercial advertisement is an advertisement that conveys a commercial message whose main goal is to make a final profit. Unlike commercial advertisement, public service advertisement is a message that is conveyed with a social purpose, or not for profit. The principle behind a PSA is that it owes parallel information that should benefit the general public, only to the interest of the beneficiary. In this sense, its content must be of public interest and must provide unbiased and motivational information that helps people to react to particular public problems, to the preservation of the environment (Mandell, as cited in Mohamed, Larouz, & Yachoulti, 2019, p. 22). Kasali, (as cited in Tinarbuko, 2017) states that in public service advertisements, social messages are presented to raise public awareness of the number of problems they must face. PSAs are used by the government to disseminate its programs. Seeing its function as a media in the social field, PSAs contain messages about national awareness, humanity, health, education, and the environment. Furthermore, PSAs, in particular, in the form of messages about avoiding the risk of being exposed to Covid-19 became the focus of the research. This is based on the reality that PSAs contain signs and messages, both verbally and nonverbally (visually).

2.2. Semiotics

Semiotics views that facts are not everything; behind the fact, there is something else, namely meaning. This view is a contradiction from the perspective of natural science which states that facts are everything. Semiotics is the science of signs (Hoed, 2014; Kridalaksana, 2011; van Lier, 2004). Furthermore, Hoed (2014) states that signs involve all things, both physical and mental, both in the world and in the universe, both in the human mind and the biological systems of humans and animals, which are interpreted by humans. Thus, a sign can be said to be a sign if it has meaning for humans. Semiotics
provides an understanding of cultural values in the communication process (Mikhaeil & Baskerville, 2019).

In the semiotic text, Barthes (1957) sees a text as a sign that must be seen as having terms of expression (E) and content (C). Thus, (1) a text is an entity that has linguistic elements; (2) as a being in understanding it must rely on the rules in the language of the text; (3) is part of a culture so that it cannot be separated from its cultural context and spatiotemporal environment, in the sense that it must consider the factors of producing and receiving texts.

According to Pierce (1940), the universe consists of signs. This is a pan-semiotic view of our universe. Humans interpret natural, social, and cultural phenomena through a process that occurs in their cognition, namely semiosis. Signs are seen as a structure depicted in cognition, but as a semiotic process, namely, a three-stage cognitive process of meaning that departs from something that can be sensed or thought. Therefore, Peirce's semiotic model is also called pragmatic semiotic because it departs from the external form of signs that can be sensed by humans (representamen). Peirce's model is triadic because it sees humans giving meaning to signs through a three-stage cognitive process of meaning called semiosis. The stages are (1) the perception of the representamen (R), namely the external form of the sign that is directly related to the human senses (often equated with the meaning of the sign); (2) The “spontaneous” representation of the representamen on the object (O), which is a concept that is known to the sign user in his cognition and is related to the representamen; (3) further interpretation by the sign user, which is called the interpretant (I) after the representamen is associated with the object.

2.3. Modern hermeneutics

Hermeneutics is a discipline whose main attention is devoted to clear rules of text interpretation. In other words, hermeneutics is a text-oriented interpretation (Ricoeur, 2005; Thomson, 2005).

In the modern era, there are new trends in the area of language research that culminated in the presence of a philosophy of language analysis which views all philosophical studies as having to depart from linguistic observations and their functions. On the other hand, hermeneutics also deals with texts, while language is a form of text. Thus, hermeneutics also views linguistic issues as important (Thalib, 2018). Thus, the search for meaning in a text from a hermeneutic perspective is also important to uncover hidden meanings in the text.

In analysing the text of PSAs, based on Ricoeur's hermeneutics, there are five meanings involved in the analysis process, namely (1) the meaning of the elements of text formation (language); (2) the meaning of the text based on the background of the text producer; (3) the meaning of the text based on the text's environment (including pictures and atmosphere as well as the target group); (4) the meaning of the text based on its relation to other texts; and (5) the meaning of the text based on the text's dialogue with the reader;
3. Method

This research used a descriptive qualitative approach. The method of providing data in this study applied an online search method, namely conducting data browsing through online media such as the internet or other network media (Bungin, 2007). Data sources in this study were three PSAs concerning the covid-19 issue retrieved from three online website media, namely (1) the website of the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia; (2) Republika online; and (3) Kompas.com. The data collected in this research were continued by applying an advanced technique in the form of note-taking (Mahsun, 2006), namely recording several forms that are relevant to the research from the use of written language in the covid-19 PSAs. The focus of this PSA study was on the language element, while the nonverbal element (image) was not the focus of the analysis. The selected data were analyzed using two theories, namely semiotic theory and hermeneutic theory. In semiotic analysis, the writer referred to the theory developed by Barthes (1957) and Peirce (1940). Meanwhile, in hermeneutic analysis, the writer referred to the modern hermeneutic theory developed by Ricoeur (1982).

4. Findings and discussion

This study only focuses on the analysis in terms of the language used in public service advertisements, while images (nonverbal) that support verbal texts are not included in the complete analysis. Analysis of the language used in PSAs is to find both explicit and implicit meanings from semiotic studies (Roland Barthes and Charles Sanders Peirce) and modern hermeneutics (Paul Ricoeur).

4.1. The analysis of PSA 1
4.1.1. Roland Barthes and Charles Sanders’ semiotics

Figure 1. Public service advertisement 1

(Figure 1. Public service advertisement 1 (https://bersaahadapikorona.kemdikbud.go.id/iklan-layanan-masyarakat-COVID-19/))

In the primary system of Barthes theory, public service advertisements in [PSA1] pakai masker ‘wearing masker’, harga mati ‘fixed price’ ga pakai marker ‘not wearing a
mask’ *bisa mati* ‘can die’ illustrate that the statement of this public service advertisement message is a government agency, in this case, the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia regarding the necessity of wearing masks for everyone. This is the expression (E) and content (C), while in the secondary system, it can be interpreted that the Indonesian state is under great threat of massive death due to the presence of the coronavirus in most parts of the world. Therefore, to anticipate this, readers are required to wear masks. Educated people or those who are directly involved with the world of health will have a better level of understanding of the content of the message conveyed. This is different from the case with ordinary people, who get different understandings and often get understanding from gossip sources through the word-of-mouth process, some even do not believe that covid-19 exists or is just a political conspiracy.

Furthermore, from the perspective of Peirce's theory of semiosis, *pakai masker, harga mati. ga pakai masker bisa mati* ‘wearing a mask, is fixed price. ‘not wearing a mask can die’ is a sign (representamen) that refers to an object, namely a public service advertisement containing an appeal on how to avoid the spread of the coronavirus. At the interpretant stage, it can be said that one of the interpretations is that if you want to avoid death due to the coronavirus, the reader must wear a mask. If you don't use a mask, death can threaten anyone because this virus does not recognize social status, gender, age, race, ethnicity, religion, and others. Based on the interpretation of the text used, wearing a mask is the most important part of avoiding death. At the bottom of the text, "3M (Mencuci tangan, ‘washing hands, Memakai masker ‘wearing masker’, dan Menjaga jarak ‘social distancing’) is written in letters that are smaller than the words above. The meaning of 3M is not clearly explained because the text producers assume that the abbreviation 3M (washing hands, wearing masks, and social distancing) has been very popular among readers since the covid-19 pandemic.

### 4.1.2. Ricoeur's hermenetic analysis

Hermeneutic understanding of the text must further ask who made the text, what thoughts were behind the making of the text, how the thought of the text maker developed until the text was produced, and so on (Hoed, 2014). In the process of Ricoeur's hermeneutic analysis, broadly speaking, the analysis of public service advertisements in [1] can be described as follows.

#### 4.1.2.1. Meaning of the text elements

The meaning of the text elements used in PSA 1 is shown in table 1.

**Table 1**

Meaning of the text elements.

<table>
<thead>
<tr>
<th>Language elements</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Regarding the meaning of the text elements in table 1 above, the text producer of the PSA 1 tries to convey a message that there are two choices for the readers, alive or dead. To avoid death, the readers must obey the health protocol determined by the government appropriately.

4.1.2.2. Background of the text producer

This public service text advertisement about the appeal to wear masks was made by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia. Judging from the producer of this ad text, the main targets of this ad are students, teachers, lecturers, and education staff to always wear masks to avoid cases of death due to coronavirus infection. Because the producers of the text know that the target audience for the advertisement text delivered is mostly students and college students, the choice of words is adjusted to the communicative language that is not too formal, and there is even the use of non-standard words, such as "ga" to replace the word "tidak" ‘not’.

4.1.2.3. Environment of the text

The text environment in [image1] consists of several types, namely: (1) a photo of a handsome young man wearing a mask. The selection of a handsome young man's photo as the model used is to attract the attention of the ad's target audience, which is mostly students and college students; (2) photos of health workers with complete PPE (Personal Protective Equipment) burying corpses that died due to exposure to Covid-19 in a mass grave specially provided for the victims of Covid-19. The photo on the grave gives an illustration to the readers that this coronavirus has claimed the lives of victims on a large scale; (3) in the upper right corner there is a logo "Remember Mother's Message" and the logo of a government agency. The logo containing the words "Remember Mother's Message" depicts the love of a mother who always reminds her child to wear a mask, while the agency logo describes the producer of public service advertisement texts; (4) the text is communicated more targeting educational community groups who are well acquainted with the existence of Covid-19.
4.1.2.4. Relations to other PSA texts

The relationship between the larger and smaller printed text in this public service advertisement is interpreted as the main text that becomes the most important concern for the readers of the text. In addition to being printed larger, the main text is also given a striking colour contrast so that it can be the focus of being read by the target advertisement. This text is also related to public service advertisements about Covid-19 in various media, both print media and online media. There are many similar texts whose essence is to break the chain of the spread of Covid-19.

4.1.2.5. Dialogue with the PSA readers

There is a cultural convention that dominates the readers of this public service advertisement text. First, the readers are convinced that the coronavirus exists (even though it is not visible), and is deadly. Second, there are some people who still ignore the call for wearing masks because they are not sure that the virus exists, or is just being exaggerated. This dichotomy raises public awareness of the importance of wearing masks.

4.2. The analysis of PSA 2

4.2.1. Roland Barthes and Charles Sanders’ semiotics

![Image of PSA 2]

**Figure 2.** Public service advertisement 2 (https://www.republika.co.id/berita/qhcmb9283/)

PSA 2 begins with the question sentence “*menang perang tanpa senjata?*” ‘win the war without weapons?’. Here, the producer of the text reduces the element of the sentence whose origin is “*bisaakah kita menang perang tanpa senjata?*” ‘can we win the war without weapons?’ Next, the text producer answers with one word “*bisa*” ‘can’. The text producer again gives the command “*pakai masker mu*” ‘wear your mask’.

Based on the semiotic analysis developed by Barthes, the primary element (denotation) of the PSA text above is the message conveyed by President Joko Widodo (Jokowi) to the Indonesian people to always wear masks in order to fight the widespread coronavirus that has hit the world through public service advertisements. While the
secondary elements (connotations) can be understood differently by text users. Connotatively, it can be interpreted as a major threat to human life, which at any time could be threatened with death. Here, Jokowi uses the metaphorical phrase “win the war without weapons?” which illustrates that Covid-19 is an invader (enemy) and we are at war against the virus without using weapons. We can win the war if we always wear masks.

Based on the semiotics developed by Peirce, the phrase “Win the war without weapons? Can. Wear your mask” is a sign (representamen) referring to Jokowi's message to avoid the deadly threat of Covid-19 (object). At the interpretant stage, it can be interpreted that if we want to survive the threat of covid-19, we must protect ourselves with masks.

4.2.2. Ricoeur's Modern Hermeneutic Analysis

Starting from the semiotic view developed by Barthes and Peirce above, if the analysis is based on the modern hermeneutics developed by Ricoeur, the PSA text “win the war without weapons? Can. Wear your mask,” can be outlined as follows.

4.2.2.1. Meaning of the text elements

The meaning of the text elements used in PSA 2 is shown in table 2 below.

Table 2
Meaning of the text elements.

<table>
<thead>
<tr>
<th>Language elements</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>menang perang tanpa senjata?</td>
<td>The producer of the text asks the reader whether he wants to succeed in fighting the threat of Covid-19 which worries the hearts of all people.</td>
</tr>
<tr>
<td>'win the war without weapons?'</td>
<td></td>
</tr>
<tr>
<td>bisa</td>
<td>The producer of the text convinces the reader by highlighting the information that the readers of the text can be free from the threat of death due to Covid-19 (reference).</td>
</tr>
<tr>
<td>'can'</td>
<td></td>
</tr>
<tr>
<td>pakai maskermu</td>
<td>The producer of the text tries to suggest that readers wear masks to be free from the deadly threat of Covid-19 (conative).</td>
</tr>
<tr>
<td>'wear your mask'</td>
<td></td>
</tr>
</tbody>
</table>

Regarding the meaning of the text elements in table 2 above, the text producer of PSA 2 tries to convey a message to the readers that the spread of the coronavirus can be overcome by wearing masks. The figurative language menang perang tanpa senjata? ‘win the war without guns?’ represents that the horror issue of the coronavirus can be prevented by obeying health protocols, one of which is wearing maskers. The text producer, in this case, strives to make an emotional connection with the readers.
4.2.2.2. Background of the text producer

This text is a public service advertisement text created by President Jokowi to influence the Indonesian people to always wear masks to protect themselves from the deadly threat of Covid-19. As a head of state and public figure, Jokowi has more ability to influence the Indonesian people, especially his supporters. This is also based on Jokowi's experience in his political career, starting from being the Mayor of Solo, and the Governor of Jakarta, to becoming the President of the Republic of Indonesia, which can attract people's attention. Jokowi's influence can be a means to influence the people, especially his supporters, to comply with the health protocol.

4.2.2.3. Environment of the text

The text in this public service advertisement comes because of the prolonged Covid-19 pandemic situation that has claimed tens of thousands of lives in almost all parts of Indonesia. Not only is it life-threatening, but Covid-19 has also ravaged the Indonesian economy, unemployment has risen sharply everywhere and has caused psychological threats to the people because deaths occur massively everywhere. Judging from this public service advertisement, at the bottom of the main text, the name “Joko Widodo”, “President of the Republic of Indonesia” is written to assure the readers of the text that the message was officially delivered by the Head of State. Along with the writings of the President of the Republic of Indonesia, it is written "Republika" as the identity of the media that publishes the public service advertisement.

4.2.2.4. Relations to other PSA texts

This text is closely related to the presence of other texts that preceded it, such as texts that increase the number of deaths exposed to Covid-19, texts of people's economic downturn, texts on violations of health protocols, and other texts related to the spread of Covid-19 in Indonesia.

4.2.2.5. Dialogue with the PSA readers

The dialogue of the text with the reader is seen from the identity of the reader of the text of the public service text delivered by Jokowi. In this case, there is the possibility of self-identification as commoners who are more easily influenced by the content of the text, intellectual groups who study more deeply the contents of the text, and opposition groups that tend to be a priori to the content of the text because the existence of Covid-19 is considered a conspiracy so that the people No need to be overly afraid of Covid-19.
4.2. The analysis of PSA 3

4.3.1. Roland Barthes and Charles Sanders’ semiotics

![Figure 3. Public service advertisement 3](https://megapolitan.kompas.com/read/2020/11/03/12024381/kasus-COVID-19)

PSA 3 above uses an affirmative sentence “Corona itu nyata !!! ‘the Corona is real!!!’ created by the producer of the text to emphasize to the public that the coronavirus really exists and has claimed millions of lives in a very short time. Based on the semiotic analysis developed by Barthes, the primary (denotative) element of the text above is the producer's confirmation that the coronavirus really exists.

The secondary (connotative) meaning of the text above is the existence of a group of people who doubt or do not believe in the existence of the coronavirus. On the other hand, the rise of buzzers on social media from government opposition groups is able to lead to public opinion as if the coronavirus is an exaggerated political conspiracy. These buzzers are able to hegemonize the community which causes public distrust of the government in fighting the existence of this coronavirus.

Based on the semiotic theory developed by Peirce, “Corona is real” is a sign (representation) that refers to an object, namely a public service advertisement containing an affirmation that the issue about the corona is not a rumour, but a fact. At the interpretant stage, it can be interpreted that there are concerns that text producers will increase the death toll due to the Covid-19 pandemic due to public distrust of the existence of the coronavirus.

4.3.2. Ricoeur's Modern Hermeneutic analysis

Based on modern hermeneutics developed by Paul Ricoeur, the text on PSA 3 can be interpreted as follows.

4.3.2.1. Meaning of the text elements

The meaning of the text elements used in PSA 3 is shown in table 3 below.
Table 3
Meaning of the text elements.

<table>
<thead>
<tr>
<th>Language elements</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>corona itu nyata</td>
<td>The text producer, in this case, emphasizes the information function to the text reader that the coronavirus really exists and threatens anyone's life (referential function)</td>
</tr>
</tbody>
</table>

Regarding the meaning of the text elements in table 3 above, the text producer of the text tries to convey a message that coronavirus is invisible but it exists and threatens human’s life. The text producer convinces the readers that the coronavirus is not a rhetorical issue but a factual condition.

4.3.2.2. Background of the text producer
The writing of this PSA cannot be separated from the background of the distrust of some people in the existence of COVID-19. This condition is caused by the many issues that mislead their understanding of the existence of this COVID-19 pandemic, especially the massive information circulating on social media. There are certain groups who attribute this condition to political interests; trying to carry out hegemony to the community, so that the COVID-19 issue is only considered as a lie, a manipulation, and even a conspiracy.

4.3.2.3. Environment of the PSA text
The text of this public service advertisement is written in larger letters to make it easy for readers to read. Judging from the structure, the sentence used in this PSA is not a command sentence, but a news sentence that has a referential function. The use of three exclamation marks behind the sentence is not intended to command the reader (command sentence) but is information in the form of a news sentence. The three exclamation marks affixed at the end of the sentence are intended to emphasize to the reader that there is still rumours in the community regarding the distrust of some people towards the existence of covid which is being intensively fought by the government. The visual element in the form of an image of two armed soldiers illustrates to the reader that we are at war with Covid-19.

4.3.2.4. Relations to the other texts
This PSA text appears because there is a connection with other texts that have developed in the mass media and social media, stating that Covid-19 is a lie, manipulation, and even a conspiracy. Misleading issues need to be addressed with a notification to the public so as not to become hegemony in society.
4.3.2.5. Dialogue with the PSA readers

This PSA text is a dialogue to readers on issues that are developing in society that Covid-19 is a lie, fabrication, and even a conspiracy. The sentence “Corona is real!!!” is the text producer's answer to the distrust of some people in the existence of Covid-19 which has claimed many lives.

5. Conclusion

This study found explicit and implicit meanings lying in the PSA texts which were used as data in this study, both in terms of semiotics and modern hermeneutics. Explicitly (denotatively), the three PSAs aim to invite the public to jointly break the chain of the spread of Covid-19 which is very threatening to human life, either by using masks, not underestimating the existence of the coronavirus, and not even to be provoked by narratives from certain groups that lead public opinion on conspiracy issues. Implicitly, the texts of the three PSAs can be interpreted that the Indonesian state is in great threat of death as a result of the prolonged Covid-19 pandemic. Covid-19 is a fact that has taken millions of people's lives in various regions in Indonesia. The existence of Covid-19 is not a conspiracy, but really stalks the human soul every time.

References


