

Online News Framing: Muhammadiyah's Stance on the COVID-19 Vaccine Controversy

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ABSTRACT

As happened in many countries, the COVID-19 vaccine program in Indonesia has experienced challenges due to various hoaxes that accompany it. One of the controversies in the community was that the hoax of the vaccine was doubtful of its halalness. Having faced this situation, the government invited Muhammadiyah the largest Islamic community organization to participate in socializing the use of vaccines to reduce cases of the COVID-19 pandemic. The purpose of this study is to find out the online news media that framed Muhammadiyah in facing the COVID-19 vaccines and analyzed the framing of the news using Robert Entman's theory. This research methodology uses a qualitative content analysis approach. The results of this study show that there are differences and perceptions of online news media (non-Muhammadiyah and Muhammadiyah affiliated) in framing Muhammadiyah's stance on the aspects of problem definition, problem diagnosis, moral judgment, and problem-solving related to the COVID-19 vaccine controversy. The differences encountered are the number of articles and the content of the messages raised between Muhammadiyah's non-affiliated media and Muhammadiyah's affiliated media. The similarity lies in the framing of Muhammadiyah's support for President Joko Widodo's invitation to fight the COVID-19 vaccine hoax. The results of this study are important in answering Muhammadiyah's position about the rejection of the government's vaccine program.

Keywords: Muhammadiyah, News Framing, Vaksin Covid-19

ABSTRAK

Seperti terjadi di banyak negara, program vaksin COVID-19 di Indonesia mengalami tantangan akibat beragam hoax yang menyertainya. Salah satu kontroversi di masyarakat yaitu adanya hoax kandungan vaksin yang diragukan ke-halalannya. Menghadapi situasi ini, Pemerintah mengajak Muhammadiyah sebagai organisasi masyarakat Islam terbesar ikut mensosialisasikan penggunaan vaksin guna menekan kasus Pandemi COVID-19. Tujuan penelitian ini untuk mengetahui media berita online yang melakukan pembingkai berita Persyarikatan Muhammadiyah menghadapi kontroversi vaksin COVID-19 dan menganalisis pembingkai berita tersebut menggunakan teori Robert Entman. Metodologi penelitian ini menggunakan pendekatan kualitatif konten analisis. Hasil penelitian ini menunjukkan terdapat beberapa perbedaan dan persamaan media berita online (non-Muhammadiyah dan afiliasi Muhammadiyah) dalam membingkai sikap Muhammadiyah pada aspek definisi masalah, diagnosa masalah, penilaian moral dan penyelesaian masalah terkait kontroversi vaksin COVID-19. Perbedaan yang ditemui yaitu jumlah artikel dan isi pesan yang diangkat antara media non-afiliasi Muhammadiyah dengan media afiliasi Muhammadiyah. Persamaannya terletak pada isi pembingkai dimana menampilkan dukungan Muhammadiyah atas ajakan Presiden Joko Widodo dalam melawan hoax vaksin COVID-19. Sehingga hasil penelitian ini penting dalam menjawab posisi Muhammadiyah dalam menghadapi situasi penolakan program vaksin yang dijalankan pemerintah.

Kata kunci: Muhammadiyah, News Framing, Vaksin Covid-19

Introduction

By the first week of January 2021, there were over 89 million verified COVID-19 cases and about 2 million confirmed COVID-19 fatalities globally. (P. Soares et al., 2021) The impact of the COVID-19 pandemic has affected various aspects of life. (Anisa Suci Rahmawati & Ferry Darmawan, 2022). The global crisis has put pressure on various fields, especially public health around the world. The international world is moving quickly in collaboration with various parties.

Various mitigation programs cannot function well in the absence of medical safeguards that prevent viral transmission. The beginning of COVID-19 immunization is a ray of hope for a return to normalcy. (P. Soares et al., 2021) Unfortunately, community suspicions have cast a shadow over this vaccine effort. However, in order to provide widespread immunological protection, a safe and effective COVID-19 vaccine must also be broadly recognized and embraced by the general public. (Coe et al., 2022) Vaccine reluctance, a worldwide phenomenon, may stymie international efforts.

Meanwhile, in the Indonesian context, news about the COVID-19 pandemic has increasingly dominated media content since March 2020. Several

mitigation schemes from the government have been enacted such as establishing a self-quarantine program, social distancing, Large-Scale Social Restrictions (PSBB) throughout the archipelago. (Suri et al., 2021) . The Indonesian government also vaccinated their people to stop the transmission of COVID-19. According to (Fundrika, 2020) the Indonesian government has created a roadmap for COVID-19 vaccination in Indonesia.

Minister of Health Budi Gunadi Sadikin, mentioned that the vaccination plan in Indonesia will be carried out in two periods. This has been consulted with the Indonesian Technical Advisory Group on Immunization (ITAGI) which is tasked with providing advice to the Minister of Health. The first period will start from January to April 2021. (Rahayu, 2021) However, the implementation of COVID vaccination in Indonesia is also not easy to implement.

Survey research on COVID-19 vaccination acceptance rates were discovered from 33 different nations throughout the world. The greatest percentages of COVID-19 vaccination acceptability among adults representing the general population were recorded in Ecuador (97.0%), Malaysia (94.3%), Indonesia (93.3%), and China (91.3%).

Kuwait (23.6%), Jordan (28.4%), Italy (53.7), Russia (54.9%), Poland (56.3%), the United States (56.9%), and France (58.9%) had the lowest COVID-19 vaccination acceptance percentages. (Sallam, 2021)

Although high, a survey conducted by Nature Medicine in 2021 found several reasons for vaccine hesitancy. (Matrajt et al., 2021). What makes the results of this survey interesting is that people's hesitancy towards vaccines is related to the low level of public trust in the government. The Central Statistics Agency (BPS) conducted an online survey on public confidence in the COVID-19 vaccination program. The result is that 20 percent of citizens are reluctant to be vaccinated. (Genantan: 2021 in Suri et al., 2021)

News is sometimes conceptualized not in accordance with the constructed results. In this sense, the news conveyed in the media has the subjectivity of the author and is not neutral. News published in the media is the result of the knowledge and thoughts of journalists. This means that before loading a news story, the news has been processed in accordance with the interests and ideology of the media. The media constructs through news that appears by choosing a point of view, determining news sources, and defining

actors and events (Boer et al., 2020). Language is the main element to tell reality, conceptualize for certain meanings, and narrate so that certain values are understood and interpreted (Damayanti et al., 2016). Mass media is a means of disseminating messages / information to the public. (Masyhuri, 2016 in (Aldo Gunawan & Setiawan, 2022)

Each mass media has different characteristics of delivering news, including print, electronic, and online media. Online media, which is growing rapidly, plays an important role in the reporting of any information. (Setiawan & Nulhakim, 2019). Media is not only a means of conveying information, but also as a tool to lead public opinion in accordance with the objectives of the mass media. News online media may cause diverse public opinions. (Indrawan, 2017) News online media, such as detikNews, able to make an attraction to invite the curiosity of readers. (Aldo Gunawan & Setiawan, 2022).

Based on the search results, 58 search results were obtained about COVID-19 vaccine news and hoaxes. Furthermore, the data was compiled, analyzed, reviewed according to the research objectives and found 13 relevant news titles. Hoax news about the COVID-

19 vaccine related to the composition is that the COVID-19 vaccine contains dangerous ingredients including borax, formalin, vero cells, and some even say the vaccine is made from male baby fetuses. The hoaxes about side effects are death, infertility, enlarging male vital organs, and modifying human DNA. (Rahayu, 2021); (Suri et al., 2021)

According to the Oxford dictionary, hoax is an action that aims to make someone believe something that is not true, especially something unpleasant (Oxford Dictionary, 2020). Hoax is a popular term widely used to indicate false information. Hoax is defined as information that contradicts facts, even if it is misinformed. (Nadzir et al., 2019) Currently, hoax news, especially in online media, has become a public concern. On the one hand, the flood of information confused people in determining the truth of information, which ones are false and truth. The existence of false information can cause conflict between groups of friends. This is because each group feels the information it conveys is the correct information. (Gumgum et al., 2017) (Rahayu, 2021)

Meanwhile, according to the results of an online survey on the existence of the national hoax virus held by Mastel

(Indonesian Telematics Society), which was disseminated to the public on February 7, 2017 to 1,116 respondents within 48 hours, it shows that the type of hoax related to health ranks third, as much as 41.20%, under the hoax of socio-political news and SARA. It can be interpreted that health issues are important to be discussed in Indonesia. Furthermore, there are many groups of people who do not have adequate understanding of health information and digital literacy to stem hoaxes in the community. Information extracted from the survey conducted by Mastel is information about the understanding of hoaxes, people's behavior in responding to hoaxes, the form of hoax channels, the impact of hoaxes on life, society and how to overcome hoaxes. (Suri et al., 2021)

One of the contributors to this misleading information is information spread in various media. The rapid technology of the digital world, including online media platforms, has made hoaxes increasingly difficult to stop. Public also consume the hoax circulation of the COVID-19. Therefore, the Indonesian government must also socialize the use of vaccines. News content of victims who died after the vaccine, information about vaccines that impact the human body to

become sick in the long period, and information about raw materials or contents of the COVID-19 vaccine that are not halal caused indirectly the community resistance. (Sangaji et al., 2021)

Vaccination is actually done to create herd immunity..(Dewi, 2021) ; (Suri et al., 2021) The first thing that must be proven is the safety of the ingredients in the vaccine itself. Various initiatives, such as large-scale funding and industrial-scale manufacturing of the vaccine well before the demonstration of vaccine efficacy, safety and human challenge studies, have been considered and implemented. ((Machida et al., 2021)

Vaccine hesitancy is described as the delay, unwillingness, or refusal to receive immunization despite the availability of vaccination services. The World Health Organization (WHO) has named it one of the top ten global health hazards for 2019. Vaccine hesitancy is the result of a complex decision-making process that is influenced by a wide range of contextual, individual and group, and vaccine-specific factors, such as communication and media, historical influences, religion/culture/gender/socioeconomic, political barriers, geographic barriers, vaccination experience, risk

perception, and vaccination program design. (F. Soares & Recuero, 2021)

Meanwhile, vaccination takes several stages in Indonesia. First stage, vaccines are intended for health workers; second, vaccination targets are public service workers; third, vaccination targets are carried out for vulnerable people to geospatial, social, and economic conditions; and last stage, vaccines are intended for the community and economic actors with a cluster approach according to vaccine availability. Based on the Decree of the Minister of Health Number H.K.01.07 / Menkes / 9860 /2020 concerning Determination of Vaccine Types for the Implementation of Corona Virus Disease Vaccination (COVID 19), it is known that six types of vaccines have been determined for the vaccination process in Indonesia. The types are vaccines produced by P.T. Bio Farma (Persero), Astra Zeneca, China National Pharmaceutical Group Corporation (Sinopharm), Moderna, Pfizer-BioNTech, and Sinovac Biotech Ltd. (Rahayu, 2021)

The Indonesian government certainly cannot work alone in implementing the COVID-19 vaccination program. President Joko Widodo collaborated with various communities, such as community organizations, medical

personnel, celebrities, the private sector and the volunteers in campaigning for this vaccine. The Muhammadiyah Association is one of the religious community organizations asked to help socialize the benefits of vaccines. President Jokowi conveyed the invitation directly at the moment when he delivered a speech in front of Muhammadiyah residents and journalists.

Muhammadiyah is an Islamic Movement that carries out da'wah amar ma'ruf nahi munkar with the aim and purpose of upholding Islamic teaching to realize a truly Islamic society. Muhammadiyah believes Islam concerns all aspects of life including aqidah, worship, akhlaq, and mu'amalat duniawiyah which is an integral unit and must be implemented in individual and collective life. By carrying out the mission of the movement, Muhammadiyah can realize or actualize Islam to be rahmatan lil-'alamin in life on this earth. (Sholikin, 2020)

Islam is highly concerned with everything ingested for the benefit of the body, whether it be food, drink, or medicine. Al- Quran and Hadith, as sources of Islamic law, have stated what may and cannot be taken, including taking medication, which is analogous to taking a

vaccination. Two requirements must be considered: first, the material or content, and second, the mode of acquisition. According to Islamic law, the food ingested must be halal and thayyib. Halal in terms of religion, thayyib in terms of eligibility and health norms. 38 MUI issued Fatwa No. 02 of 2021, determining that Sinovac's COVID-19 Vaccine is Halal and Pure. (Sangaji et al., 2021)

Reports on non-halal vaccine raw materials are breaking news in the world of vaccinations. The components of the Sinovac COVID-19 vaccination indicated on the box caused quite a commotion in various social media forums. The halal status of vaccinations is critical for the community and necessitates openness, particularly for the Muslim population. It is widely known that the vaccine manufacturing process may include materials derived from pigs as a medium. Concerning the halal status of the COVID-19 vaccine made by Sinovac, the Indonesian Ulema Council (MUI) released Fatwa No. 02 of 2021, deciding that the COVID-19 vaccine supplied by Sinovac was pronounced halal and religiously pure.

Based on the information above, there are three important things that become the state of the art of the research. First, various previous studies that have

described the situation of the implementation of the COVID-19 vaccination program both globally and in Indonesia. Second, identifying types of hoaxes, ranging from health, conspiracy to religious affairs that affect the acceptance of the global and Indonesian public. Finally, the state of the art raised is to find out the mass media's news framing of the Muhammadiyah organization in response to the government's invitation to fight the COVID-19 vaccine hoax.

Research that raises the issue of COVID-19 and the vaccination program in Indonesia has been carried out by several previous researchers. There are many research issues that have been studied. One of the themes raised is the dissemination of hoaxes about the COVID-19 vaccine. As conducted by (Anisa Suci Rahmawati & Ferry Darmawan, 2022) which examines media coverage regarding the distribution of the COVID-19 vaccine. The purpose of the research was to determine the credibility (accuracy, believability, bias and completeness) of online media Detik.com and Kompas.com. Meanwhile, (Sangaji et al., 2021) examine media coverage of COVID-19 and the resistance of the Indonesian people. This research is a legal sociology study that discusses the public's response to government policies

regarding the COVID-19 vaccine with an Islamic legal approach.

However, there are still many lacunae that have not been studied regarding the COVID-19 vaccine research problem. One of these gaps is how Islamic community organizations such as Muhammadiyah respond to the COVID-19 vaccine controversy. As one of the Islamic mass organizations with followers spread throughout Indonesia, the government sees Muhammadiyah's strategic role in campaigning for this vaccine program. This research will examine the above issues through online news media framing. The online news that becomes the object of research is news portals owned by Muhammadiyah and non-Muhammadiyah throughout 2020-2021.

Based on the situation above, this research has two research objectives. First, knowing the online news media owned by Muhammadiyah and non-Muhammadiyah framing the news of Muhammadiyah responding to President Joko Widodo in socializing the COVID-19 vaccine. Second, analyzing news with 4 stages, namely problem definition, problem diagnosis, moral judgments, and emphasizing solutions in online news media.

The novelty of this research lies in the study of the content of communication messages on Muhammadiyah and non-Muhammadiyah news portals related to Muhammadiyah's attitude towards the COVID-19 vaccine controversy. The mass media is an inherent function in building social construction in society.

This media social construction was expressed by the reality of Peter L Berger and Luckman who saw the mass media phenomenon as a process of externalization, objectivation and internalization (in Arriaga et al., 2021) According to this perspective, the stages in the mass media social construction process occur through: the stage of preparing construction material, the construction distribution stage, the construction formation stage and the confirmation stage.

Another novelty is that this research chose to use the framing method as a form of constructionism. The constructionist approach has its own assessment of how the media, journalists, and news are seen. (Cacciatore et al., 2016) Facts or events are the result of construction, for constructionists reality is subjective. Reality itself is created by the construction process created by journalists. So reality here is not an objective, because

reality is made based on the construction process and certain views.

Method

This research uses a qualitative approach, namely research that contains data to provide an overview of the presentation of the report. The data may come from interview scripts, notes, photos, documents, notes or memos, and other official documents. (Moleong, 2017) The method used in this research is the Robert Entman model of framing analysis. In this model, Entman explains that framing is the process of selecting issues and highlighting certain aspects. Highlighting is the process of making news more meaningful, interesting, and more remembered by the audience. Reality aired more prominently or conspicuously has a greater chance of being noticed and influencing the audience in understanding a reality (Entman, 1993)

The next stage is data collection. This stage is a technique to collect accurate data for the carrying out a certain problem-solving process in accordance with the data. Meanwhile, this research uses two types of data collection techniques, namely primary and secondary data. The primary data source is from the analysis of the COVID-19 vaccine news text on various

news portals. There are four categories of news portals studied, namely:

- a. Muhammadiyah-affiliated news portal, which is a news portal belonging to the Muhammadiyah that contains information about the Association's activities in Indonesia.
- b. Non-Muhammadiyah news portals, namely news portals whose ownership is not affiliated with Muhammadiyah so that the news content is more diverse.

Data collection was carried out using keywords related to the portrayal of Muhammadiyah on the issue of COVID-19 vaccination in online news media. The selected online news media consisted of non-affiliation and Muhammadiyah affiliation. The article period is all articles published throughout 2020-2021. The following are the results of the article collection/

Result and Discussion

Table 1. Reporting Data on the Framing of Muhammadiyah's Stance on the COVID-19 Vaccine

No	Non-affiliated news media	Muhammadiyah Affiliate Online News Media
1	https://politik.rmol.id/read/2020/11/18/461801/jokowi-minta-bantuan-muhammadiyah-untuk-berantas-hoax-soal-vaksin-COVID-19/	https://aisyiyah.or.id/topik/satu-tahun-muhammadiyah-selenggarakan-vaksinasi-vaksinasi-untuk-semua
2	https://www.jawapos.com/nasional/16/10/2021/respons-muhammadiyah-soal-kehalalan-vaksin-zifivax/	https://COVID19.muhammadiyah.id/spirit-al-maundalam-vaksinasi-COVID-19/
3	https://surabaya.liputan6.com/read/4457560/muhammadiyah-jatim-vaksin-COVID-19-adalah-sebuah-keniscayaan	https://COVID19.muhammadiyah.id/vaksinasi-COVID-19-kita-jaga-kyai-di-mbs-ki-bagus-hadikusumo-bogor/
4	https://www.kompas.tv/article/124543/cegah-hoax-jokowi-minta-muhammadiyah-bantu-berikan-penjelasan-yang-benar-soal-vaksinasi	https://COVID19.muhammadiyah.id/ikhtiar-menuju-sehat-mccc-gelar-vaksinasi-di-temanggung/
5	https://rm.id/baca-berita/nasional/85817/muhammadiyah-dari-kacamata-ahlus-sunnah-vaksinasi-wajib-hukumnya	https://COVID19.muhammadiyah.id/siapkan-duta-vaksinasi-mentari-COVID-19-vaccine-mpku-pp-muhammadiyah-adakan-pelatihan-edukator-vaksin/
6	https://rakyatku.com/read/206065/pimpinan-muhammadiyah-makassar-jangan-terpengaruh-informasi-hoax-tentang-vaksinasi	https://COVID19.muhammadiyah.id/tk-aba-mardi-putra-bantul-gelar-vaksinasi-COVID-19-anak-usia-6-tahun/
7	https://www.tribunnews.com/corona/2020/11/18/jokowi-minta-muhammadiyah-bantu-tangkal-informasi-hoaks-soal-vaksinasi	https://www.mediamu.id/2021/08/05/muhammadiyah-with-you-pwm-diy-bahas-hoax-dan-fakta-seputar-vaksinasi/

No	Non-affiliated news media	Muhammadiyah Affiliate Online News Media
8	https://hariansinggalang.co.id/muhammadiyah-siap-sukseskan-vaksinasi-anak-usia-6-11-tahun/	
9	https://www.beritasatu.com/news/793865/kirim-surat-muhammadiyah-minta-presiden-tarik-rem-darurat	
10	https://joglosemarnews.com/2020/11/presiden-jokowi-ajak-muhammadiyah-ikut-sosialisasikan-vaksin-COVID-19-agar-masyarakat-tenang-dan-peroleh-informasi-yang-benar/2/?singlepage=1	

Source: Primary data research, 2022

The data above shows that there are a total of 18 articles that raise the issue of Muhammadiyah's stance on the COVID-19 vaccine. Non-Muhammadiyah online news media wrote the most articles, namely 11 articles, followed by Muhammadiyah-affiliated online news media with 7 articles. The various issues written provide an overview of the framing of each category of online media towards Muhammadiyah on the issue of the COVID-19 vaccine. This media framing explores the content of each article based on Robert Entman's theory used.

In general, although there are more non-Mohammedan online news media framing, it does not necessarily provide a complete framing. So it is important to see how Muhammadiyah-affiliated online news media have framed themselves on the

COVID-19 vaccine controversy from 2020 to 2021. Through the three categories of online news media, the reading of Muhammadiyah's framing of this issue becomes more complete

In the category of non Muhammadiyah online news media: www.rmol.id, www.liputan6.com, www.kompas.tv, www.rm.id, www.tribunnews.com, www.beritasatu.com, www.jawapos.com, www.rakyat.com, www.hariansinggalang.co.id, www.joglosemarnews.com, and www.republika.co.id. Finally, Muhammadiyah-affiliated news media that wrote the same issue were 3 media, namely www.aisyiyah.or.id, www.COVID-19.muhammadiyah.id, and www.mediamu.id. So that the total number of online news media that raised the issue of Muhammadiyah's framing of the

COVID-19 vaccine controversy was 14 media throughout 2020-2021.

Next is the framing carried out by all the media above. Using Robert Entman's theory, the elements of media framing are problem definition, problem diagnosis, moral judgments and emphasizing problem solving. The discussion of media framing includes each of the 4 elements carried out by each category of online news media studied. The following is a discussion of each element of media framing based on Robert Entman.

The first element is problem definition. In this element, there are five non-Mohammedan online media news that write about the problem surrounding the COVID-19 vaccine, namely www.beritasatu.com. The article was written about Muhammadiyah's assessment of the spike in COVID-19 cases throughout June 2021. In the article written, it was stated that Muhammadiyah's request reflected on the significant spike in cases in recent weeks and reached the highest number on June 27, 2021 with 21,342 confirmed positive cases. The inclusion of this highest case number shows Muhammadiyah's response to the alarming conditions at that time.

Seeing this critical problem, beritasatu.com informed that the Muhammadiyah Central Leadership sent a letter to President Joko Widodo. The article further explained that the President should take firm steps in handling the COVID-19 pandemic, which has experienced a recent spike, one of the points asking the government to pull the emergency brake.

Meanwhile, Republika.co.id wrote a framing of the definition of the COVID-19 vaccine problem from the perspective of Muhammadiyah. The article states that the COVID-19 pandemic requires an acceleration of the vaccine discovery process. This situation occurred due to various hoax information that made conditions crowded if you don't want to be called chaotic. The presence of hoaxes accompanying the COVID-19 vaccine at that time did affect some groups of Indonesian society, which the government had to overcome.

The spread of hoaxes was also written by regional online news media in Makassar and Yogyakarta when writing Muhammadiyah's stance on the COVID-19 vaccine plan. In fact, www.rakya.com (located in Makassar) informed that many hoaxes occurred, one of which was about death two years after vaccination.

Meanwhile, www.joglosemarnews.com addresses the problem so that people do not get misinformation, false information or hoaxes about this vaccine. The definition of the problem is also reviewed by www.jawapos.com which raises several reasons why people do not or have not vaccinated.

Although national and regional media wrote Muhammadiyah's perspective in assessing the problem definition of the COVID-19 vaccine issue, it turns out that this largest Islamic organization also uses its own affiliated media. There are at least two news portals that explain how Muhammadiyah sees this controversial issue. The first news portal, www.mediamu.id, wrote the opinion of its cadre, dr. Ekorini Listiowati, M.M.R. (MCCC PP Muhammadiyah), who said not all people are easily invited to the vaccine program being accelerated by the government. This response occurred because people worried there were no proven-antiviral drugs or vaccines at that time.

An online news portal that also writes the definition of the problem is www.COVID19muhammadiyah.id. Dr. Ekorini Listiowati explained that education about the COVID-19 vaccine is necessary considering the need to increase public

awareness of the COVID-19 vaccination. The message of this article is actually the same as other that hoaxes are very easy to believe because of the lack of education to the public at that time. The government itself has made efforts to carry out this vaccine campaign, but the strategy is not optimal in counteracting hoaxes.

The second element is the diagnosis of the problem that Muhammadiyah sees with the COVID-19 vaccine. The framing of Muhammadiyah's stance can be seen from several non Muhammadiyah news online media such as www.rm.id. Muhammadiyah expressed its diagnosis through the General Secretary of the Muhammadiyah Abdul Mu'ti, who considered that one of the obstacles to the implementation of the COVID-19 vaccination was mutual distrust or a crisis of public trust. Still in the same media, people believe hoaxes about vaccines allegedly designed by other countries to paralyze Indonesia.

Another diagnosis was written by an Islamic-affiliated news media, www.republika.co.id. In the article that raised Muhammadiyah's stance, it was revealed that there were issues of vaccine efficacy, conspiracy issues, business issues, human rights issues, planting chips to religious issues. These various

diagnoses have caused the trust level of some people to be low. Unfortunately, there is no further explanation of the various forms of concerns that arise above.

Similar situations were also written by regional online news media. The first is www.jawapos.com. The article revealed that some Indonesians still do not believe in COVID-19. Not only that, Jawapos also revealed that there are also people who are afraid of being injected. A different perspective was revealed by www.hariansinggalang.co.id. In the article written, it was revealed that Muhammadiyah's diagnosis encouraged the government to provide additional vaccine stocks. According to the organization founded by KH Ahmad Dahlan, there has been an uneven allocation of vaccines, especially in remote areas. The desired vaccine availability is in line with Muhammadiyah's plan to conduct vaccinations in the outermost and farthest areas in collaboration with USAID.

Not to be left behind with other news media, Muhammadiyah-owned media also provide a diagnostic framing of the problems identified regarding the COVID-19 vaccine. The media www.mediamu.id also expressed the same condition by revealing that there are still people who ask whether vaccines are halal

or haram. Not stopping there, many people also doubt how effective it is. Another diagnosis emphasized by health practitioner Dr. Agus Widyatmoko, Sp.PD, M.Sc. (Lecturer FKIK UMY, doctor at PKU Muhammadiyah Gamping Hospital and AMC Muhammadiyah Yogyakarta Hospital) who requires a balance in the number of people vaccinated to form communal immunity.

The third element is the framing of the moral assessment of the COVID-19 vaccine from Muhammadiyah written by online news media throughout 2020-2021. Media framing in this third element is in higher quantity than the previous two elements. Online news media www.rmol.id reported President Joko Widodo's invitation to Muhammadiyah to eradicate fake news or hoaxes about the COVID-19 vaccine. According to him, Muhammadiyah can help provide correct explanations and understanding. This effort is intended so that people do not get misinformation or harmful hoaxes. Muhammadiyah can help by socializing the usefulness of the COVID-19 vaccine.

Furthermore, www.liputan6.com which raised the statement of the Chairman of the East Java Muhammadiyah Regional Leadership, Saad Ibrahim. According to him, there needs to be an explanation for

those who reject the COVID-19 vaccine. Furthermore, he even appealed to Muhammadiyah residents in East Java to follow the line determined by PP Muhammadiyah, namely that vaccines are a necessity. Kompas.tv also framed this third element by presenting President Joko Widodo's statement to Muhammadiyah. The content of the message given is that Muhammadiyah can help provide correct explanations and insights so that people do not get misinformation or harmful hoaxes,

Www.rm.id also do the same thing by quoting an explanation from the General Secretary of PP Muhammadiyah Prof. Dr. Abdul Mu'ti. However, rm.id quoted a different message where it was stated that vaccination is part of the human attempts to have resilience, immunity. Mu'ti also revealed that vaccination is not treatment, but protection. Regarding the possibility of a failed vaccine, rm.id also complements the statement of the Secretary of PP Muhammadiyah which contains scientific truth or probability around 99.99 percent. It means there is a 1 percent chance that it does not match projections and predictions. In fact, there is a 95 percent level of confidence. So, there is a 5 percent chance of not matching. However, this does not mean the 99 or 95

percent is eliminated and considered not important at all.

Rm.id also explained Mu'ti's message for Moslems which contains that vaccination is part of a correct effort. According to him, the belief of ahlu sunnah in dealing with problems is that it is obligatory to prioritize efforts before reliance. The final endeavor is in accordance with Allah. This attitude is characteristic of a muttaqin servant of Allah, who realizes that every human being must make an effort. But one should not depend on the effort, because everything depends only on Allah. Both must be combined.

Another media framing Muhammadiyah's moral message on the COVID-19 vaccine is www.tribunnews.com. Just like Kompas.tv, President Joko Widodo's statement asking Muhammadiyah to participate in combating hoax information about vaccinations was used in the published news article. Furthermore, it was written that Jokowi invited Muhammadiyah to assist the government in the vaccination program, especially regarding socialization in the community. Jokowi's hope is certainly based on the strength of Muhammadiyah as a large

Islamic community organization in the country with millions of followers.

Regional online news media are also not left behind in framing Muhammadiyah as giving a moral message on COVID-19 vaccination. The media www.jawapos.com framed it through a statement from the Chairman of the Muhammadiyah COVID-19 Command Center (MCCC), Agus Samsudin, through the Vaccine for All campaign. This campaign targets all levels of society including the elderly, disabled and interfaith. Furthermore, Agus Samsudin invited the public to live a healthy life if they do not want to get sick.

Another coverage came from www.hariansinggalang.co.id which contained information that the Central Muhammadiyah was ready to succeed in the COVID-19 vaccination for children aged 6 to 11 years, following the issuance of an emergency use permit for the Sinovac vaccine for children from the Food and Drug Administration (BPOM). In contrast to other online media, www.rakyatku.com chose a news angle containing a message that hoaxes do not apply in Muhammadiyah. This is due to the educational factors and Muhammadiyah members have been

trained to recognize and counteract hoax information.

Meanwhile, www.joglosemarnews.com framed the statement of the President of the Republic of Indonesia, Joko Widodo, inviting Muhammadiyah residents to socialize the COVID-19 vaccination program. The government is preparing a COVID-19 vaccine, so Jokowi hopes Muhammadiyah will help provide correct explanations to the public. The President's hope was responded by the Rector of Universitas Muhammadiyah Surakarta (UMS) Prof. Dr. Sofyan Anif who said Muhammadiyah wants to show the world, not only Indonesia, that Muhammadiyah remains committed to humanity with all the efforts during this pandemic.

Of course, Muhammadiyah-affiliated media are not left behind in writing the aspect of delivering moral messages on the COVID-19 vaccine hoax controversy. The media www.aisyiyah.or.id, for example, emphasizes that Muhammadiyah has a Vaccination for All program aimed at all, across religions, all ages (in accordance with the provisions), gender, ethnicity and race. Even this program is also for people with disabilities and people with mental disorders (ODGJ). To increase the coverage, various efforts were made

including seminars, religious studies, making fliers and posters calling for vaccination, and creating Frequently Asked Questions (FAQ).

Another specialized affiliated media is www.COVID19.muhammadiyah.id which broadcasts moral messages from the Association. The framing is presented through a statement by one of the Muhammadiyah figures, Hajriyanto, who revealed that Islam orders humans to cooperate regardless of ethnicity, nation, religion and mazhab or sect. According to him, humans must constantly cooperate like this, not only on the vaccination agenda but also in various other fields. In fact, KH Ahmad Dahlan established one of the most important assemblies, namely PKO, which stands for *Pertolongan Kesengsaraan Oemoem* at that time. Furthermore, Hajriyanto revealed that the spirit of *Al Ma'un* gave birth to Muhammadiyah orphanages, the Muhammadiyah Disaster Management Center (MDMC) and the Muhammadiyah Charity Institute for Zakat Infaq Shodaqoh (Lazismu). Finally, Hajriyanto emphasized that Muhammadiyah continues to be consistent and committed to working in the realm of universal humanity through the

various institutional assemblies it has established.

In addition to the moral message above, covi19.muhammadiyah.id media also explained again that vaccination is an endeavor to pick up good destiny. This was also conveyed directly by MBS *Mudir Ki Bagus Hadi Kusumo*, *Kiai Nur Achmad*, *S.Ag., MA*. So Muhammadiyah in collaboration with *Baznas* and the Indonesian Ministry of Religion and Islamic mass organizations in Indonesia created the "*Kita Jaga Kyai*" program with the COVID-19 vaccine. Meanwhile, *Coordinator of the Information Dissemination Division of MCCC PP Muhammadiyah, Budi Santoso, S.Psi., M.KM*, this program supports the Muhammadiyah COVID-19 Command center in campaigning the optimistic tagline to face the pandemic.

In fact, not only Muhammadiyah, the Muhammadiyah *Aisyiyah* women's organization was also written in framing the moral message of support for the COVID-19 vaccine program. Muhammadiyah and *'Aisyiyah* as education providers will always be proactive, accompany government regulations and always maintain welfare, including health, which affects children's intelligence and readiness in the future.

This was explained by the Chairperson of Aisyiyah Yogyakarta Regional Leadership, Zulaikha when opening the COVID-19 vaccination event for children aged 6-11 years. Thus written by COVID19.muhammadiyah.id.

A call for moral support was also written by the portal www.mediamu.id. In the article it wrote, this portal invited all community groups to fight together to defeat this virus. In the quotation written, mediamu.id wrote a statement from Dr. Agus Widyatmoko, Sp.PD, M.Sc. (Lecturer FKIK UMY, doctor at PKU Muhammadiyah Gamping Hospital and AMC Muhammadiyah Yogyakarta Hospital). Namely, vaccine development is important to suppress and end the pandemic and prevent the emergence of new mutations. According to him, we must also join hands so that scientists around the world provide input on how to develop vaccines.

The last framing is the emphasis on solving the problem of the COVID-19 vaccine hoax from the perspective of Muhammadiyah. There are three national online news media that frame this element. The first is www.liputan6.com which contains Muhammadiyah's appeal about the importance of the COVID-19 vaccine with clear reasons, such as in the context

of health or on the instructions of a doctor. Providing clear information will encourage people to participate in the vaccine program provided by the government. www.rm.id framed the similar messages by quoting the Secretary General of PP Muhammadiyah Prof. Dr. Abdul Mu'ti who revealed that to fight the crisis of confidence, Mu'ti argued, people must get an explanation that is easy to digest. Either scientifically, or from a religious perspective. [Liputan6.com](http://liputan6.com) also quoted Muhammadiyah Chairman Haedar Nashir's speech, which has been explained many times that vaccines are a necessity. Muhammadiyah fully supports the government's efforts in this vaccination

Meanwhile, in the Islamic-affiliated news media, only www.republika.co.id wrote Muhammadiyah's problem-solving framing of the COVID-19 vaccine controversy. Republika quoted health practitioner Dr. Agus Widyatmoko, Sp.PD, M.Sc. (Lecturer FKIK UMY, doctor at PKU Muhammadiyah Gamping Hospital and AMC Muhammadiyah Yogyakarta Hospital) emphasizing that vaccination is actually one of the most effective models in health sector findings. Through this framing, Republika wants to explain that Muhammadiyah invites the public to

choose vaccines as a solution to problems facing the global pandemic.

Regional online news media also framed Muhammadiyah's perspective in solving the COVID-19 vaccine problem. The first media is www.jawapos.com. In the coverage published, this media based in East Java wrote the following important points:

- a. The Muhammadiyah Central Leadership welcomes the presence of the Zifivax vaccines that have received Emergency Use Authorization (EUA) from BPOM. In fact, the COVID-19 vaccine has received a halal and clean certificate from the Indonesian Ulema Council (MUI).
- b. This halal certificate can be one way for those who are hesitant. The halal and clean certificate from MUI, at least, provides a confidence level for those who decide not to vaccinate.
- c. Prevention is always better. The ruling is that if it can be prevented from getting sick, before the harm comes and it can be prevented. In fiqh, it must be done.
- d. Agus said that Muhammadiyah continues to carry out education through socialization to the community. One of the materials

presented is COVID-19 vaccination according to Islam.

- e. PP Muhammadiyah itself previously gave five recommendations regarding the implementation of vaccination. First, Muhammadiyah supports that BPOM must remain independent and transparent in determining vaccine safety and neutralization tests. Second, Muhammadiyah supports the independence of MUI in carrying out its role in determining the halalness of vaccines, and is ready to be part of the process. Third, handling a pandemic is not solely resolved by vaccines, therefore it is important for the government to implement the right communication, education and campaign strategies regarding the function of vaccines. The government must ensure the post-vaccination monitoring and evaluation process. Fourth, Muhammadiyah with its health infrastructure will jointly succeed the vaccination program to overcome the COVID-19 pandemic in Indonesia. And, fifth is to expect the community to remain strict in enforcing 3M (wearing masks, maintaining distance, washing hands) and 3T (testing, tracing, treatment).

Meanwhile, the online news media www.hariansinggalang.co.id frames problem solving through MCCC quotes. The quote contains an appeal to all institutions both under the auspices of the Muhammadiyah Charity (AUM) and under PP Muhammadiyah to support and accelerate the vaccination process for children. There was even a statement from Doctor Agus (Lecturer at FKIK UMY, doctor at PKU Muhammadiyah Gamping Hospital and AMC Muhammadiyah Hospital Yogyakarta) who is ready to follow up on the BPOM's decision on the EUA of the COVID-19 vaccine. Vaccinating children under 12 years old is also an effort to break the chain of transmission.

Information on framing problem solving was also written by www.rakyatku.com. This Makassar-based news portal reported on the activities of the Muhammadiyah launching the Muhammadiyah Mentari Vaccination program for All at the Makassar Muhammadiyah Poltekkes campus on Monday (25/10/2021). In fact, the coverage quoted the statement of the Deputy Chairperson of the General Health Supervisory Assembly (MPKU) PP Muhammadiyah, Dr. Slamet Budiarto said this program was to support the national

COVID-19 vaccination acceleration program through more equitable access for all people in Indonesia. According to him again, Muhammadiyah has contributed in achieving the success of vaccination dose 1 as much as 70.50 percent and dose 2 as much as 50 percent.

Muhammadiyah's participation and contribution in the COVID-19 vaccine program was also written by other regional online news media. The news media is www.joglosemarnews.com. In the published coverage, this media wrote that one of the efforts made by Muhammadiyah was by forming the MCCC (Muhammadiyah COVID-19 Command Center) from the regional leadership level (PDM) to the central level. Not to mention in each ortom which also moves independently in preventing the spread of COVID-19.

The next framing was by Muhammadiyah's own affiliated online news media. Online media www.mediamu.id wrote vaccination is one way to deal with the spike of cases that occurred. This statement was delivered by Doctor Agus (Lecturer at FKIK UMY, doctor at PKU Muhammadiyah Gamping Hospital and AMC Muhammadiyah Yogyakarta Hospital). Meanwhile, Dr. Ekorini Listiowati confirmed

Muhammadiyah's commitment to a vaccination program representing Muhammadiyah COVID-19 Command Center (MCCC). She said after the launch of the COVID-19 vaccination program, Muhammadiyah, which has 117 hospitals and more than 200 clinics, immediately prepared to carry out the vaccination. This information is written at www.aisyiyah.or.id. Even this Muhammadiyah women's news portal further wrote several other important points, namely:

- a. In the midst of the pros and cons of COVID-19 vaccination with various hoaxes spread, Muhammadiyah started a study of vaccines with various experts and organizations, to get input on whether vaccines are safe, effective and halal.
- b. With the determination to accelerate the achievement of vaccination in Indonesia, Muhammadiyah collaborates with many parties for its implementation, namely the Ministry of Health, TNI, POLRI, KADIN, and other community organizations, both from within and outside the country.
- c. Ekorini explained that more than 30,000 health workers in Muhammadiyah health service participated in vaccinations in

January-February 2021. On March 9, 2021, Muhammadiyah started mass vaccination with simultaneous activities at the Muhammadiyah Central Leadership Office in Menteng Jakarta and Jl. Cik Di Tiro Yogyakarta for public officials and the elderly, which was opened directly by the General Chairman of the Muhammadiyah Central Leadership.

- d. Likewise, Muhammadiyah conducts vaccinations in various locations in Indonesia. Muhammadiyah have organized at least 600,000 doses until the end of 2021. Muhammadiyah, which has at least 1,290 elementary schools, targeted to vaccinate 100,000 children.

Intense framing was also carried out by the portal www.COVID19.muhammadiyah.id. This news portal straightforwardly conveys the real form of problem solving carried out by the Muhammadiyah Association over the COVID-19 vaccine controversy. This problem-solving message is written in several news articles, as follows:

- a. Ambassador Hajriyanto Y Thohari via teleconferencing application from Beirut, Lebanon said he welcomed the PDM of Sika Regency together with MDMC and MCCC to facilitate the

- implementation of vaccinations for Sikka Regency residents. This shows that collaboration is important for achieving national targets of vaccination.
- b. Muhammadiyah Boarding School (MBS) Ki Bagus Hadi Kusumo located in Jampang, Bogor conducted COVID-19 vaccination. The vaccination was coordinated by the Muhammadiyah COVID-19 Command Center (MCCC) PP Muhammadiyah. This activity is a collaborative program with Baznas and the Indonesian Ministry of Religious Affairs. The program name is "Kita Jaga Kyai".
 - c. MCCC PP Muhammadiyah in collaboration with the Pesantren Development Institute PP Muhammadiyah and parties whom support the prevention of COVID in Islamic boarding schools. This was conveyed by Doctor Fifi who is also a lecturer at the Faculty of Medicine, Muhammadiyah University Jakarta.
 - d. The Regent of Temanggung, HM Al Khadziq, Muhammadiyah Temanggung Regional Leadership, especially the MCCC has played roles in handling the COVID-19 pandemic. So far, they have involved in the socialization of health protocols, care and treatment of residents exposed to COVID-19, providing assistance to residents affected by the pandemic and holding vaccinations for the community.
 - e. Mentari COVID-19 Vaccine (MCV) MPKU PP Muhammadiyah or the national vaccination acceleration program supported by USAID held a COVID-19 vaccine educator training on Sunday, October 03, 2021 through an online meeting. The participants of this training were 337 educator team candidates, who have been delegated by the Muhammadiyah Interfaith Vaccination organizing committee in the regions through the Muhammadiyah Regional Leadership (PDM).
 - f. The purpose of this educator training event is to form vaccination ambassadors in the provinces with the aim of accelerating vaccines in all regions of Indonesia.

Conclusion

Based on the discussion above, the number of articles about Muhammadiyah's response to President Joko Widodo's appeal to campaign for the COVID-19 vaccine comes more from non-

Muhammadiyah affiliated news portals. Although less in quantity, Muhammadiyah-affiliated online news media complement information from non-Muhammadiyah affiliated media. Based on their news framings, the two media groups actually complement each other. There are similarities in the framing of the two media groups in the aspects of problem definition, problem diagnosis, moral judgments and emphasizing problem solving on Muhammadiyah's attitude towards the COVID-19 vaccine controversy. Apart from President Joko Widodo's appeal, Muhammadiyah's stance is clear, namely inviting the public (including Muslims) to make the best use of the vaccine program. This position is reflected by the framing of support for the COVID-19 vaccine programs. Readers can see from texts containing appeals, moral support, vaccine programs, and the quotes from Muhammadiyah officials both at the central and lower levels. Thus, Muhammadiyah is not part of the community groups that reject the COVID-19 vaccine in the name of religion. Finally, this research may contribute to enriching media studies that raise factual issues that occur at the national level. Nevertheless, research using media framing theory

around COVID-19 is still needed to complement this research.

References

- Aldo Gunawan, & Setiawan, H. (2022). Analisis Framing Zong Dang Pan dan Gerald M. Kosicki Pada Pemberitaan Pembagian Vaksin Covid-19 di DetikNews. *Jurnal Educatio FKIP UNMA*, 8(1), 134–138. <https://doi.org/10.31949/educatio.v8i1.1791>
- Anisa Suci Rahmawati, & Ferry Darmawan. (2022). Kredibilitas Pemberitaan Distribusi Vaksin Covid-19 di Indonesia. *Jurnal Riset Jurnalistik Dan Media Digital*. <https://doi.org/10.29313/jrjmd.v1i2.491>
- Arriaga, P., Esteves, F., Pavlova, M. A., & Piçarra, N. (2021). Editorial: Coronavirus Disease (COVID-19): The Impact and Role of Mass Media During the Pandemic. In *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2021.729238>
- Boer, K. M., Pratiwi, M. R., & Muna, N. (2020). Analisis Framing Pemberitaan Generasi Milenial dan Pemerintah Terkait Covid-19 di Media Online. *Communicatus: Jurnal Ilmu Komunikasi*, 4(1), 85–104. <https://doi.org/10.15575/cjik.v4i1.8277>
- Cacciatore, M. A., Scheufele, D. A., & Iyengar, S. (2016). The End of Framing as we Know it ... and the Future of Media Effects. *Mass Communication and Society*, 19(1), 7–23. <https://doi.org/10.1080/15205436.2015.1068811>

- Cangara, H. (2016). *Pengantar ilmu komunikasi* (Edisi kedua). RajaGrafindo Persada.
- Coe, A. B., Elliott, M. H., Gatewood, S. B. S., Goode, J. V. R., & Moczygomba, L. R. (2022). Perceptions and predictors of intention to receive the COVID-19 vaccine. *Research in Social and Administrative Pharmacy*. <https://doi.org/10.1016/j.sapharm.2021.04.023>
- Dewi, R. D. C. (2021). Literatur Review: Dinamika Komunikasi Kesehatan Di Masa Pandemi Dan Pasca Vaksin Covid-19. *Linimasa: Jurnal Ilmu Komunikasi*, 4(2), 206–213. <https://www.journal.unpas.ac.id/index.php/linimasa/article/view/4220>
- Entman, R. M. (1993). Framing: Toward Clarification of a Fractured Paradigm. *Journal of Communication*, 43(4), 51–58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>
- Fundrika, B. A. (2020). *Vaksinasi Covid-19 di Indonesia Akan Dibagi Dua Gelombang, Begini Urutannya*. Suara.Com. <https://www.suara.com/health/2020/12/30/111017/vaksinasi-covid-19-di-indonesia-akan-dibagi-dua-gelombang-begini-urutannya>
- Gumgum, G., Justito, A., & Nunik, M. (2017). Literasi Media: Cerdas Menggunakan Media Sosial Dalam Menanggulangi Berita Palsu (Hoax) Oleh Siswa Sma. *Pengabdian Kepada Masyarakat*, 1(1), 35–40. <https://doi.org/1410-5675>
- Indrawan, R. M. J. (2017). Dampak Komunikasi Politik Dan Opini Publik Terhadap Perilaku Masyarakat. *WACANA, Jurnal Ilmiah Ilmu Komunikasi*, 16(2), 171. <https://doi.org/10.32509/wacana.v16i2.14>
- Matrajt, L., Eaton, J., Leung, T., Dimitrov, D., Schiffer, J. T., Swan, D. A., & Janes, H. (2021). Optimizing vaccine allocation for COVID-19 vaccines shows the potential role of single-dose vaccination. *Nature Communications*. <https://doi.org/10.1038/s41467-021-23761-1>
- McQuail, D. (2011). *McQuail's Mass Communication Theory* (6th ed.). SAGE.
- Moleong, L. J. (2017). *Metodologi Penelitian Kualitatif* (Edisi Revisi). PT. Remaja Rosda Karya.
- Nadzir, I., Seftiani, S., & Permana, Y. S. (2019). Hoax and Misinformation in Indonesia: Insights from a Nationwide Survey. *Perspective*, 5(2), 1–12. <https://www.researchgate.net/publication/339375879%0AHoax>
- Rahayu, R. N. (2021). Vaksin Covid 19 Di Indonesia: Analisis Berita Hoax. *Intelektiva: Jurnal Ekonomi, Sosial & Humaniora Vaksin*, 02 no. 07(07), 39–49.
- Sallam, M. (2021). Covid-19 vaccine hesitancy worldwide: A concise systematic review of vaccine acceptance rates. In *Vaccines*. <https://doi.org/10.3390/vaccines9020160>
- Sangaji, R., Basri, H., Wandu, W., Sultan, M., & Rasyid, N. (2021). The News of the Covid-19 Vaccine in the Media and Public Resistance in Indonesia: A Study of Islamic Law. *Samarah*. <https://doi.org/10.22373/sjhk.v5i2.10892>
- Sejarah Singkat Muhammadiyah*. (2010). Muhammadiyah.or.Id. <https://muhammadiyah.or.id/sejarah-singkat-muhammadiyah/>

- Setiawan, H., & Nulhakim, L. (2019). Analisis Framing Zong Dang Pan dan Gerald M. Kosicki pada Pemberitaan Kasus Dugaan Ujaran Kebencian Habib Bahar Bin Smith kepada Presiden Joko Widodo (Studi Kasus pada Kompas.com Edisi 3 Desember 2018). *Jurnal Artikula*, 2(1), 48–53. <https://doi.org/10.30653/006.201921.19>
- Sholikin, A. (2020). Cyberspace : Ruang Publik Baru bagi Aktivitas Politik Muhammadiyah. *Profetik: Jurnal Komunikasi*, 12(2), 156. <https://doi.org/10.14421/pjk.v12i2.1585>
- Soares, F., & Recuero, R. (2021). How the Mainstream Media Help to Spread Disinformation about Covid-19. *M/C Journal*. <https://doi.org/10.5204/mcj.2735>
- Soares, P., Rocha, J. V., Moniz, M., Gama, A., Laires, P. A., Pedro, A. R., Dias, S., Leite, A., & Nunes, C. (2021). Factors associated with COVID-19 vaccine hesitancy. *Vaccines*. <https://doi.org/10.3390/vaccines9030300>
- Suri, I., Hidayat, N., & Halim, U. (2021). Komunikasi kesehatan di era digital: strategi pemerintah dalam sosialisasi program vaksin Covid-19. *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial*, 8(4), 850–858. <http://jurnal.um-tapsel.ac.id/index.php/nusantara/article/view/4627https://doi.org/10.1016/j.vacun.2021.01.001>