Covid-19 health communication barriers in multicultural communities in Indonesia

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Abstract The central government and local governments conducted a series of health communication efforts to deal with the Covid-19 pandemic. However, there is still a behaviour of rejection in the community that is published in the news in mass media, including online media. In public health, including health communication programs, especially in the health belief model, a person's behaviour to follow or refuse can be influenced by health beliefs. Uncertainty can be an obstacle to behaviour. From a multicultural perspective, beliefs are one of the things that affect public health behaviour. This study tried to uncover the barriers to Covid-19 health communication in multicultural communities in Indonesia using online news content analysis methods on the five most popular news websites in Indonesia, namely okezone.com, tribunnews.com, pikiran-rakyat.com, kompas.com, and detik.com. The results revealed that the top five barriers to health communication were religion (17.2%), survival (12.67%), beliefs that Covid-19 does not exist (9.9%), self-immunity confidence (9.9%), and stigma (9.9%).

Keywords: health communication; health belief model; barriers; multicultural

INTRODUCTION
In early 2020, the world was rocked by the Covid-19 pandemic. The disease is widespread very fast and causes unrest around the world. Pandemics that were originally expected to end until the second year remain, with the virus increasingly evolving. Until the end of this second year, as of October 19, 2021, cases of people infected with Covid-19 were recorded, as many as 242 million cases with a death toll of 4.91 million worldwide. At the same time, the number of Covid-19 cases (confirmed) in Indonesia is as many as 4.24 million cases with a death toll of as many as 143 thousand (ourworldindata.org, 2021). Although this global infection has decreased, the Covid-19 pandemic still exists and does not look like it will end (Bastani & Bahrami, 2020; Tan & Seetharaman, 2021; Xiang et al., 2020). Covid-19 seriously impacts various sectors of life, including the government, economy/business, education, tourism, health, and others.

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The central and local governments conducted a series of health communications to deal with this pandemic. Some policies were made in all sectors of life. The application of social distancing, education-from-home and work-from-home online, including the implementation of health protocols, mass vaccination, and the enactment of Restrictions on Community Activities (PPKM) made at several levels and published to the public.

However, these efforts did not go smoothly. Some rejections appear in the community even to the possibility of conflict published in the news in the mass media, including online media. Compared to other mass media, the news of Covid-19 in online media is massive. Indonesia Indicator (I2) data in 2020 alone, Covid-19 news, recorded as many as 5,465,266 news. Some of the news issues that appear in online media and there are still assumptions that Covid-19 does not exist and is only engineering, more trusting alternative medicine than medical treatment, more trusting shamans than doctors, even there is still a rejection of vaccines that lead to chaos in some regions (Indonesian Indocator, 2020). The covid-19 vaccine acceptance survey issued by the Ministry of Health in collaboration with ITAGI, WHO, and UNICEF, conducted on 19-30 September 2020 (UNICEF, 2020), showed that Aceh was the area with the lowest willingness to receive the vaccine (45.7%), and Papua the highest willingness to receive vaccines (74%). The reasons for its rejection are not sure of its safety (30%), unsure of its effectiveness (22%), fear of side effects (12%), distrust of vaccines (13%), religious beliefs (8%), and others (15%)

Health problems cannot be viewed from the biomedical side alone. Health is a complex and holistic problem, meaning health is also a sociocultural problem. The concept of sick and healthy behaviour and the way of looking at disease involves beliefs and cultures embraced by a certain person or group of collectives. Culture influences and is influenced by universal values (emotions and feelings that are willing to be shared with others with the same culture) and personal values (emotions and feelings formed by individuals, groups, and societies from past experiences) (Schiavo, 2014) Beliefs and cultures are different in every society. Culture can be interpreted as a set of patterns of behaviour, beliefs, ideas, thoughts, and general knowledge that become a way of life that is studied and exchanged socially until it can influence society. Each individual has different patterns, so each culture has distinctive features in defining various aspects of life, including health (Srivastava & Pradhan, 2018). A pluralist Indonesian society will give a different perception also about the beliefs and culture of the health of each of the existing ethnic groups.

Concerning the emergence of new diseases, epidemics, and pandemics, it is necessary to consider cultural perceptions that affect people's behaviour in recognising disease symptoms, access to treatment, how to receive treatment, and fear of stigma formed (Bruns et al., 2020). Cross-cultural studies believe each culture has its own

beliefs in explaining diseases and health aspects (Kahissay et al., 2017; Workneh et al., 2018).

Culture is important in shaping an individual's understanding and behaviour in a healthcare setting. Traditionally, the field of public health and health communication has treated culture as an important warning, which looks at how culture, as a contextual factor, (a) serves as a resource and product of individual health behaviours, (b) shapes community responses in offering support for some suffering that has not been silenced for others, and (c) forms institutional structures and policies that reinforce differences or minimise injustice (Hsieh & Kramer, 2021). Multiculturalism is a cultural concept that allows the emergence of mutual respect, understanding, and recognition of diversity in each interaction, including in the healthcare concept(Shakhsheer et al., 2021).

Cultural beliefs and assumptions must be considered in public health interventions (Napier et al., 2014). This attachment is useful for determining the health interventions that best suit the culture of the community to increase engagement to reduce the spread of disease (Biddlestone et al., 2020). The cultural assessment also plays a role in avoiding the relationship between disease causation and certain cultures that can lead to stigmatisation and an increase in prevalence (Sovran, 2013). Effective health communication strategies in society must be based on the target population's cultural values, perspectives, and preferred modes of living(Kaholokula et al., 2018).

Health communication is multidisciplinary of various theories, concepts, and practices that are interrelated in exchanging health information, ideas, and methods in different populations or groups. The goal is to influence, empower, involve, and support every individual and community regardless of their role in the scope of health in fighting for health behaviours or correct health policies so that, in the end, they can improve the health of individuals and community communities (Schiavo, 2014). Health communication can be defined as the study and use of communication strategies to inform, influence, and motivate individuals, institutions, and communities to make effective decisions to improve health and enhance the quality of life (Belim, 2021).

Health communication sees that individual beliefs related to better health can affect their health behaviours. The individual will feel optimistic if he believes he has the competence to manage his health to be healthier. On the other hand, if they believe illness is God's punishment for their past mistakes, they will be pessimistic and resigned or rely on healing through prayer. Beliefs also affect the potential outcomes to be achieved in terms of how they evaluate their interest in health, individually, socially, and culturally, with logical or emotional arguments. So it is important to assess priorities and the level of interest in health because it will impact expected behaviour (Schiavo, 2014).

Among various health communication approaches, the Health Belief Model (HBM) approach can be used to express general

consideration and confidence in complying with Covid-19 health rules and policies, namely by referring to HBM offered by Champion & Skinner (Lee et al., 2014). HBM was originally used by Hochbaum in 1958 to explore the beliefs of tuberculosis patients and then became one of the models of public health framework that can be relied on in understanding the reasons behind the act of acceptance or rejection of individual and community health threats. HBM has several key concepts for uncovering the reasons behind an individual's actions in preventing, screening, or controlling the condition of a disease. Its main components consist of perceived susceptibility and susceptibility and severity, perceived benefits, perceived barriers, and perceived self-efficacy (Carico Jr et al., 2021).
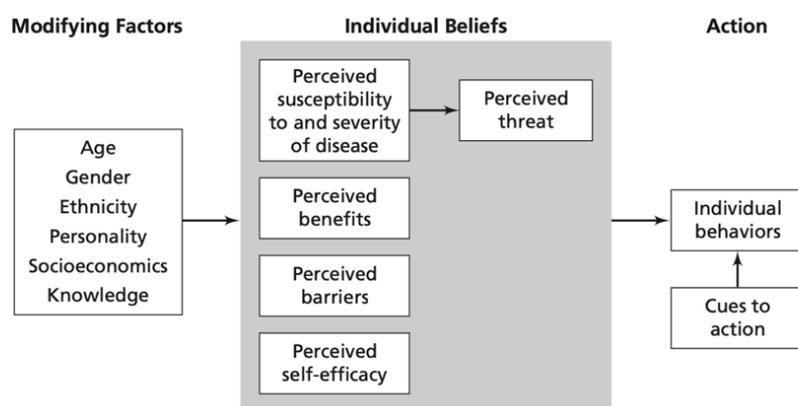
Figure 1. Champion & Skinner Health Belief Model Components
Source: (Carico Jr et al., 2021; Lee et al., 2014)

Perceived susceptibility and severity of the disease is a threats the individual feels. Perceived susceptibility is related to the belief in the possibility of contracting the disease. Perceived severity is related to the severity of the perceived and the action to be taken (needs to be treated or left alone) as well as the consequences of diseases on social life (work, family, social relationships). This perceived threat does not necessarily make individuals willing to accept health interventions unless there are benefits to be received or there is a possibility of reducing the benefits that will be received (Carico Jr et al., 2021). Another indicator that can influence individual behaviour and cues to action is barriers. The barriers in question such as discomfort (pain or emotional alterations), costs, and dangers (side effects, malpractice) (Onoruoiza et al., 2015).

In contrast, self-efficacy has to do with the individual's belief in the success of actions necessary to obtain the expected results. Readiness to act can be strengthened by other factors, such as body signals such as sneesing, dizziness, or sudden fever, or by the environment, such as exposure to information from the media. Although individuals feel the threat of the disease, obstacles can prevent treatment. Then the benefits outweigh the obstacles so that the expected behaviour change from health promotion can occur. Examining what barriers prevent individuals from complying with health interventions is important. Related to Covid-19, HBM can be used from

upstream to downstream to see the perception and readiness of the community (Jose et al., 2021), the level of public acceptance of vaccines (Wong et al., 2021), the prediction of patient motives (Mercadante & Law, 2021) or the prediction of health worker motives (Alhalaseh et al., 2020) and preventive behaviours (Fathian-Dastgerdi et al., 2021; Mahindarathne, 2021). However, it has not been used to examine barriers to health communication during Covid-19, especially mapping from the news. So far, the media has reported several events related to the public rejection of health interventions. Mapping the obstacles of some of these events is expected to provide an overview of the obstacles encountered and replace them by offering more benefits that will be obtained. Based on the background above, this study aims to uncover barriers to Covid-19 health communication in multicultural communities in Indonesia through online news media. This research is expected to provide theoretical and practical benefits. Theoretically, it is expected to add insights that can contribute to science, especially regarding health communication barriers.

METHODOLOGY

This research uses online news content analysis methods on five most accessed news websites in Indonesia, Alexa version as of October 2021, namely okezone.com, tribunnews.com, pikiran-rakyat.com, kompas.com, and detik.com. Samples taken from these five news sites are related to the rejection of the Covid-19 policy in Indonesia from January 2021 to October 2021 (Alexa.com, 2021). The selected media are major media with a fairly high and intense number of reports related to Covid-19. News filtering is done by typing several related words on each website using Google search engines.

The selected issues related to the rejection of health communication interventions (vaccines, antigens/PCR, and hospital care) and the implementation of 5M health protocols (wear a mask, wash your hands, keep a safe distance, stay away from crowds and, reduce mobility) namely rejection of vaccines, rejection of antigen/PCR tests, lazy hand washing, preferring alternative treatments or refusing medical services, refusing quarantine, not wanting to wear masks, refuse to social distancing, refuse the reduction of mobility (work from home, school from home, and Implementation of Restrictions on Community Activities).

These issues were chosen to examine the reasons that are obstacles to implementing health policy in Indonesia. These news stories are then analysed with HBM variables and mapped into several categories of obstacles associated with some literature studies. The results of mapping health communication barriers are expected to be input in preparing the Covid-19 health communication strategy.

The release of news through the google search engine about the rejections of Covid-19 health interventions between January 1, 2021, and October 31, 2021, recorded 1,578 news with the distribution of

detik.com (275 news), kompas.com (311 news), tribunnews.com (315 news), pikiran-rakyat.com (294 news) and okezone.com (383 news). After being traced with a follow-up search, not all the news can be used as a sample of research because the news content does not contain rejection of Covid-19 health interventions or non-incident locations in Indonesia. The data is then reduced to sorting out recurring news or no important new information from previous news. Follow-up search results by combing through the news one by one obtained 221 news samples considered appropriate for analysis with the number according to the issues that have been determined. The data verification process is carried out in two stages, namely, (1) when data collection and (2) when the data analysis process. Two coders verify data to obtain authentic and relevant data for the research purpose and use the Holsti formula to measure the reliability between coders. In the data analysis stage, researchers read the title and overall news content and then classified them into the following predefined themes.

Table 1. News Distribution

Health Intervention Issues	second .com		Kompas .com		Tribune news.com		Pikiran-rakyat .com		okezone .com		Total	
Refusing the vaccine	11	30,6	9	17,6	11	28,9	6	14,6	7	12,7	44	20
Not wearing a mask	5	13,9	6	11,8	4	10,5	8	19,5	7	12,7	30	14
Reject antigen and/or PCR swabs	3	8,33	3	5,88	6	15,8	7	17,1	4	7,27	23	10
Refusing to wash your hands	0	0	0	0	0	0	0	0	0	0	0	0
Refuse quarantine and/or isolation	1	2,78	9	17,6	4	10,5	8	19,5	5	9,09	27	12
Not keeping your distance or crowding	10	27,8	11	21,6	4	10,5	2	4,88	16	29,1	43	19
Resisting reduced mobility	3	8,33	6	11,8	3	7,89	8	19,5	9	16,4	29	13
Refusing medical services/alternative medicine	3	8,33	7	13,7	6	15,8	2	4,88	7	12,7	25	11
Total	36	100	51	100	38	100	41	100	55	100	221	100

Source: data processing, 2021

Of the five online media reports related to the rejection of health interventions, the biggest obstacle so far is the rejection of vaccines (20%), followed by a reluctance to keep their distance or crowd (19%). Other issues are still in the range above 10%. The issue of refusing to wash hands does not appear in the news.

All news samples were then re-mapped based on the reasons behind the rejection of the Covid-19 health intervention policy in the community that had been an obstacle so far. Health communication barriers are divided into economic, medical belief, and sociocultural. Economic factors consist of consideration of cost and survival. The belief factor in medicine consists of the assumption of Covid-19, effectiveness, side effects, procedures, self-immunity confidence, comfort, and human rights. At the same time, the sociocultural factors consist of religion, culture/tradition, social relations (family, kinship, etc.), and stigma (Covid-19 is a disgrace).

The highest barriers related to vaccine issues are the fear of side effects caused by 15 news (34%) and religious factors eight news (18%). This fear is related to information disorders (hoaxes) circulating in the community related to vaccines that can lead to death, sterility, drying of the uterus, and so on. While in the overall religious factor related to doubts about the validity of the vaccine, only one reasoned fear of cancelling the fast. Related to the refusal to wear masks is the belief in self-immunity; as many as ten news (33%) assume that vaccines no longer need masks, confidence will not be infected, and so on. In addition, there are also reasons for having the right to refuse to wear masks. There are five pieces of news (16.6%) where people already know the rules of wearing masks, but they feel they have the right to refuse to wear them because their body health is their own business, not the government's.

On the issue of antigen swabs or PCR rejection, the biggest reasons are the high cost (26%) and the assumption that Covid-19 does not exist (21%). The cost of antigen swabs and PCR is considered too expensive, especially concerning flight requirements or cross-regional travel. Another reason is the presumption that Covid-19 is a global conspiracy, government engineering to benefit from antigen swabs and PCR. While on the issue of quarantine rejection or isolation, the most common reason is the cost of survival (25.9%). Rejection of quarantine or isolation is more because the community has to work to meet their and their families needs. If they do not work because of quarantine or self-isolation without being met by the needs of their lives government, they fear they will die. Some reasoned that they would reduce benefits in place of work if they did not enter because of quarantine or self-isolation.

The reasons for staying in the crowd or refusing to keep their distance *(social distancing)* are more in the factors of social culture, namely religion (30.23%), culture/tradition (30.23%), and social relations (23.2%). Several clusters have sprung up related to religion,

such as Eid al-Fitr, Eid al-Adha, recitation, *halal bi-halal*, Christmas, and New Year. Even related traditions appear, such as homecoming, grave pilgrimage, or crowding in the market before Eid. Indonesian people also still attach importance to existing cultures or traditions despite violating health protocols such as grief events, *safar* bath rituals, and *kupatan* traditions. Maintaining social relationships, whether family or broader social relationships, is also a reason to crowd. News of the case of two babies (Jakarta and Manado) who died of contracting Covid-19 from family visits when they were newborns appeared in July 2021, or news with the tagline cluster *hajatan*, cluster *arisan*, and family holiday cluster also emerged. Religion is also one of the highest reasons for rejecting mobility reduction, such as PPKM (Social Restriction), as much as (37.9%) after reasons for survival (41%). The belief that life does belong only to God arises other than clusters of religious backgrounds, such as social distancing issues. The rejection of mobility reductions, such as PPKM policies, is greater on economic factors. There are concerns that it is difficult to make a living, shut down businesses, and reduce income behind the rejection.

The latest issue related to rejecting medical services or preferring alternative treatments is more due to stigma related to Covid-19 (56%). This sizable number shows that there are still wrong thoughts in society. There is still much public perception that Covid-19 is a disgrace, the term for fear of being caught. Some news shows the fear of Covid-19 stigmas, such as patients who escaped from the hospital, the expulsion of health workers from their home environment, the beating of patients who are positive for Covid-19, neglect of people who are thought to be affected by Covid-19, and other sad news. The stigma of Covid-19 makes people hide their disease, prevents people from seeking the right medical services, and discourages people from providing help, even alienating patients, patients' families, and health workers. Overall, the top five barriers to health communication are religion (17.2%), survival (12.67%), non-existent covid belief (9.9%), self-immunity confidence (9.9%), and stigma (9.9%).

RESULTS AND DISCUSSIONS
Overall, the top five barriers to health communication are religion (17.2%), survival (12.67%), non-existent covid belief (9.9%), self-immunity confidence (9.9%), and stigma (9.9%).

Religious Barriers to Sociocultural Factors
This obstacle shows the magnitude of the influence of religion on Indonesian society. Religious beliefs and freedom are the reasons for the rejection of society. Hsieh & Kramer concludes there are at least some key beliefs that can increase tension between cultural perspectives in Health communication, i.e. (1) Above all, not harm *(primum non-nocere)* (Hsieh & Kramer, 2021)*.* This belief relates to the patient's power to refuse his rescue procedure. The medical should not force the

patient if the patient refuses on grounds contrary to religious beliefs. The desire of doctors to perform lifesaving for patients can be restrained if rubbed against the principle of the patient's life. The principle of life and death in God's hands, death is God's destiny, so they decide to refuse medical service; (2) Freedom of Religion, the preferred protection of religious freedom from health and safety of life, also occurs in The United States where 45 states and Washington DC (except for California, Maine, Mississippi, New York, and West Virginia) apply "religious exemptions" to mandatory vaccination requirements for children despite an increased risk of harming the health of local communities (national conferences of state legislatures, 2020). Vaccine rejection also occurs in Indonesia because of the belief that vaccines are prohibited. The prohibition of congregational worship also experienced rejection because of the viral belief of God's creation, so it is better to keep worshipping than stay away from God; and 3) The right to bodily integrity, the right of the individual to refuse medical treatment, including lifesaving procedures based on the general right to self-determination (i.e., a person has the right to control his or her own body and to be free from physical attack without consent). One of the revelations is the refusal to wear masks, arguing that they have the right to decide for themselves, raising the question of the extent to which a person's right to the integrity of his or her body should be protected even if it poses a risk to the general public. Religious belief is also one of the motivations for belief in self-immunity will not contract Covid-19 with God's permission.

Sociocultural barriers include influencing the barriers in Covid-19, namely the disbelief of Covid-19. Beliefs and faith are part of the cultural sphere. Culture is a guide to life for both individuals and collectives. Distrust of the existence of Covid-19 and uncertainty about the existence of the virus can be caused by differences in the concept of disease and health between one culture and another. Certain communities who have not been sick can still go to the field if the flu alone is not said to be sick. The concept of health and pain is dominated by beliefs and beliefs embraced. Not believing Covid-19 is also due to suspicions of political propaganda that Covid-19 is government-made and a group of elites for some benefit. It causes behaviour towards health protocols and disobedience, where wearing a mask and doing social distancing is considered "strange" and "deviant behaviour". If one of the collective members of a culture wears a mask, it is considered deviant and will be ostracised by the collective group. This is the main obstacle to sociocultural enforcing health protocols in the fight against Covid-19.

Survival Value in Economic Factors
Survival values are quite prominent, where the community prioritises how to meet the needs of life first rather than health. The phrase "may not die from covid-19 but starving to death" shows the fulfilment of living needs to be the main reason people reject health policies. Health

communications, such as campaigns to wear masks, the importance of vaccines, maintaining distance, self-isolation and PPKM, become not considered if people's living needs have not been met.

Covid-19 Hoax

The next obstacle that triggers the perception that Covid-19 does not exist is the lack of public literacy in the face of information disorder or hoaxes. There are at least three known information disorder groups today: misinformation, disinformation, and malformation. Misinformation is the dissemination of incorrect information that is carried out unconsciously, not knowing that the information is false or true and that there is no purpose of hurting or harming others. In contrast, disinformation is the spread of incorrect information that is done consciously to harm others, while misinformation is also the dissemination of information to harm others, such as hate speech, harassment or bullying (Wardle & Derakhshan, 2017).

Until August 2021, the Ministry of Communication and Informatics Finding there were 1,819 hoaxes related to Covid-19 spread across 4,163 posts on social media (Rizkinaswara, 2021). The abundance of misinformation, disinformation, or misinformation, directly or indirectly, raises doubts about the ability of public authorities, including governments, health authorities, and international organisations, to deal with health problems (Brennen et al., 2020).

Self-Immunity Confidence

One of the reasons for rejecting Covid-19 health interventions is the belief that they will not be infected. Feel confident that their body has good endurance, so there is no need to be given additional vaccines or follow other health protocols. One of the forms of self-efficacy statements expressed is already feeling aware of how to protect oneself. Authority is in the individual self. It does not need to be governed by other individuals or institutions. This lack of fear of contracting Covid-19 correlates with hesitancy about the Covid-19 vaccine. Even the possibility of doubt is five times stronger than those who fear contracting Covid-19 (McElfish et al., 2021).

Social Stigma

The last obstacles related to hoaxes are social stigma and discrimination. Stigmatisation is social discrimination related to the perception as harmful, threatening, and a challenge in a person's social life. Hence, it becomes an effort to protect oneself from obstacles that threaten one's life, such as the possibility of contracting a disease, contrary to believed values, being intimidated by outside groups, etc. In this context, the stigma of Covid-19 is understood as a social action that ostracises Covid-19 sufferers as a source of the disease that can threaten social life in society (Bhanot et al., 2021). The impact of stigmatisation is real and negative for the community in obtaining treatment. Stigmatised Covid-

19 sufferers will refrain from seeking treatment because they see themselves as a threat to others, society becomes afraid of the sufferer, they will stay away, be prejudiced against it, and even in some cases, the impact of stigmatisation causes physical violence (Bruns et al., 2020). In Indonesian society, values are believed to play an important role in the survival of their society, especially traditional values such as religious values, family relationships, obedience to the ruler, and other traditional values. Adherents of these values are still opposed to divorce, abortion, the death penalty, suicide, etc. Indonesian society, in general, still emphasises economic and physical security in survival. Generally still adhere to ethnocentrism which is not easy to believe and has little tolerance (Haerpfer et al., 2020). These values also affect how Indonesians assess and react to Covid-19, including health communication and intervention.

These barriers should be used to formulate the Covid-19 health communication strategy. Further health communication must prioritise solutions rather than threats to the survivalist community. It will not motivate people to follow the delivered health advice without a solution. The government needs to strengthen social networks to meet the needs of life as a solution to economic barriers. Health communication messages can prioritise solving common problems and the importance of solidarity between communities. That covid-19 is a common struggle, not just a government struggle. In addition, the government must also be aware of the low literacy of the community on health messages. People are still vulnerable to misinformation and disinformation related to covid-19. The government needs to increase the correct information and facilitate access to that information. Messages can be packaged by considering sociocultural approaches, such as regional languages or local cultures close to the community. It can also facilitate religious leaders or indigenous leaders in helping the spread of Covid-19 health information.

CONCLUSION

The results revealed that the top five barriers to health communication are religion (17.2%), survival (12.67%), Covid-19 beliefs that do not exist (9.9%), self-immunity confidence (9.9%), and stigma (9.9%).

Religious barriers in sociocultural factors indicate the magnitude of the influence of religion on Indonesian society. Religious belief and freedom are the reasons for rejection from communities where patients can have the power to refuse medical services, can take refuge behind religious freedom, and have full rights to their rights. The value of survival in economic factors is quite prominent where the community prioritises how to meet the needs of life first rather than health. The next obstacle that triggers the perception that Covid-19 does not exist is the lack of public literacy in the face of information disorder or hoaxes while impacting the stigma associated with Covid-19 in the community.

The study only used an analysis of the content of online media news to find out and analyse the barriers to Covid-19 health communication on five news portals. The results of this study have implications for research on communication barriers and public health beliefs that can be used as considerations in developing health communication strategies. However, it must be recognised that there needs to be more comprehensive follow-up research with more media samples, longer timescales, and various indicators for a more thorough analysis. In addition, the research record on this community's health beliefs is very fluid and can experience changes depending on the situation faced by the community, like vaccines alone, with threats and some related policies proven to change the behaviour of most people to do vaccines. In addition, there needs to be additional qualitative research to explore further the perception of multicultural communities in Indonesia regarding Covid-19 health communication.

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