

# News Framing Of Anti-Vaxxers: An Analysis Of Malaysian Newspapers

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**Abstract:** The World Health Organization (WHO) named anti-vaxxers as one of the top ten public health hazards in 2019. Anti-vaxxers are a health danger since they are mostly responsible for the reemergence of deadly contagious diseases such as measles and diphtheria, that has increased by recent years. The media, as the primary source of information, are responsible for disseminating messages and public knowledge about health issues, particularly health hazards. Despite the WHO's warning, the Malaysian media paid scant attention to anti-vaxxers. As a result, this paper proposes that newspapers, as the primary source of information, should provide critical information such as scientific and credible data to challenge anti-vaccine views online, especially by appropriately framing anti-vaxxers. This study examined the Malaysian media through a quantitative content analysis of four newspapers (Harian Metro, Berita Harian, New Straits Times, and The Star) published between 1 January 2019 and 30 September 2021. The 43-month period offered adequate data for analysing reporting trends. The findings suggested that, despite the media's sensationalization of anti-vaxxers, the media continue to fall short of educating the public on the scientific facts opposing anti-vaxxers.

**Keywords:** Vaccination, Antivaxxers, Newspaper, Health Communication, Social Media

## 1. Introduction

Vaccination, as the World Health Organization [1] emphasises, is not only a personal health management strategy but also a collective health duty. Additionally, the death rate for vaccine-preventable diseases decreased by around 85 percent between 1970 and 2000. On a global scale, immunisation has avoided around 3 million fatalities from diphtheria, measles, pertussis, and tetanus [2].

Despite the immunisation program's enormous success in Malaysia and throughout the world, vaccine-hesitant groups continue in the community. Indeed, vaccine-averse groups

have existed in Europe since Jenner's first introduction of smallpox inoculation in Europe [2,3]. Notably, the first vaccine introduced significant risks, including the possibility of developing the disease it was designed to prevent. Additionally, vaccination was rejected in the 1850s in the United States. As a result, in 1853, England implemented a mandatory vaccination programme for public health purposes, penalising parents who refused to vaccinate their children. Anti-vaccine groups formed during this time period as a result of ignorance, the health risks associated with vaccination, and societal control. Anti-vaxxers contended that mandatory vaccination policies violated their right to make their own health care decisions [4].

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Vaccination has significantly improved over the years, with a lower chance of complications than in the 1800s, although anti-vaxxers persist to the present day. Capurro et al. [4] elaborated further, stating that anti-vaxxers are a vocal segment of the community. Meanwhile, Mckinnon and Ortis [3] noted that while anti-vaccine attitude is not new, it has been more pervasive in recent years as the public has increased access to vaccine-critical information from anti-vaxxers online. Anti-vaxxers' social media accounts on Twitter, YouTube, and Facebook have surpassed 59 million followers in recent years, according to experts. By 2021, all three social networking sites will be the most popular and targeted by anti-vaxxers [5]

The incidents described above demonstrate the spread of anti-vaccine beliefs on the internet, which has contributed to public fear and vaccination hesitation among Malaysians. Recently, social media platforms such as Facebook, Twitter, and Pinterest have been used to combat public health disinformation and promote pro-vaccine ideology [6]. In Malaysia, the government is adamant about educating the public about the importance of fact-checking material via [www.sebenarnya.my](http://www.sebenarnya.my) and the Ministry of Health's social media pages. Additionally, opinion leaders, including nurses, doctors, and scientists, are offering scientific data through their personal social media accounts. Medical Mythbusters Malaysia, ML Studios, and MedTweetMY are just a few of the popular accounts [7]. Additionally, "communicating health information via news media is beneficial since it reaches the public more quickly than face-to-face discussions between health practitioners and patients" [7, p.353].

Thus, the media, often known as the fourth estate, plays a critical role in alerting the public about agendas, issues, and threats by serving as a watchdog and surveillance system. According to Mohamed and Idid [8], the media as the fourth estate has an indirect social influence on how political issues and new policies are advocated and framed. Although it is not a legal part of the government, the press is seen as the fourth branch of government, alongside the legislative, executive, and judiciary branches. Similarly, Mckinnon and Orthia [3] assert that the media is accountable for delivering messages and public knowledge about health issues. Additionally, it is stated that a well-informed public, helped by the media's critical role in transmitting health-related information, will result in improved citizen decision-making, particularly in a democratic society [9].

As such, newspapers should provide critical information such as scientific and verifiable facts to refute anti-vaccine views online, including appropriately framing anti-vaxxers. Thus, this study poses the following question:

1. How are anti-vaxxers being covered in Malaysian newspapers?
2. How are anti-vaxxers framed in Malaysian newspapers?

## 2. Literature Review

Anti-vaxxers are often classified as being on the vaccine

hesitancy spectrum by research studies. Vaccine hesitancy can manifest in a variety of ways, depending on an individual's level of belief in vaccination, which can range from complete rejection to complete trust in the importance and advantages of vaccination [10]. To demonstrate, Greenberg et al. [10] defined vaccine hesitant parents as those who purposefully postpone or refuse specific immunizations for their children while believing in other forms of medical prevention. Numerous researchers have noted that the term "anti-vaxxers," which refers to those at the extreme end of the vaccine hesitancy spectrum, equals to complete rejection of vaccination; they are also referred to as vaccine deniers [4,11,12]. Meanwhile, the WHO [12] defined an anti-vaxxer as

"someone who has a very unfavourable attitude about vaccination and is unwilling to modify their minds regardless of the scientific evidence, disregards any quantity of information presented, and criticises the scientific approach in general." Indeed, vaccine denialists may even react negatively to convincing reasoning" (p.9).

The anti-vaxxers' modus operandi includes arguments about the risk of vaccination, the vaccine's association with autism, and vaccine components, all of which contribute to the public's suspicion of pharmaceuticals. Additionally, the phrase "mercury" is overused to generate public alarm and conspiracy theories including economic benefit and others. Without conviction or adequate evidence, there is just seeming misinformation and disinformation about vaccination. Despite widespread public support for vaccination and a greater proportion of pro-vaccine believers than anti-vaxxers, research has shown that anti-vaxxers are more engaged and active on social media, with Twitter being their preferred [12].

The devastation produced by anti-vaxxers over the years demonstrates unequivocally that the group is a public health hazard. To begin, anti-vaxxers have reawakened multiple vaccine-preventable epidemics. For instance, the United Kingdom saw a resurgence of measles in 2008, growing large enough to be designated endemic for the first time in 14 years. Meanwhile, France reported a total of 22,000 measles incidents between 2008 and 2011. Additionally, one of the most prominent outbreaks of the contemporary era was the California Disneyland outbreak, which infected a total of 125 victims [13]. Measles outbreaks were not rare occurrences. Polio infections have returned in Malaysia for the first time in 27 years in 2019. Diphtheria was also included on the list, even though it had been eradicated over a decade earlier. Two Malaysian infants died of diphtheria in 2016. [2]. Both epidemics were thought to be the result of anti-vaccine parents [14, 15] Thus, vaccine-preventable diseases are a threat to all strata of society; nevertheless, the question is how the media, as the primary source of information, can assist in eradicating these diseases. As a result of the threat anti-vaxxers pose to public health, there is an unavoidable necessity to examine how anti-vaxxers are depicted in the media.

It is a widely held idea that the media has a direct role in

informing the public, whether through traditional media such as newspapers, television, and radio, or through internet media such as official news websites and social media. According to Chuen, Michael, and Teh [16], newspapers and online newspapers serving as "health educators" remain the primary outlets for disseminating public health information. Globally, a recent survey found that 39% of Spain's population places a higher premium on conventional media such as newspapers and television than on internet media such as websites and social media when it comes to public health information. From the Spaniards' perspective, conventional media were capable of effectively completing their function in presenting the public with credible scientific information and advocating for the greater welfare of the [17].

As a result, numerous studies have been undertaken to emphasise the media's function in addition to informing the public about current events. According to researchers, the media has a social obligation to (a) inform the public about current events, (b) educate the public, (c) serve as the public's eyes and ears, and (d) entertain the public [18, 19, 20]. Indeed, the media has a critical influence in moulding public opinion and perspective on social issues, particularly those involving public health [10]. Priming is one of the ways in which the media can influence public opinion. Priming is the process by which editors select issues and stories to be given prominence in prime time based on their newsworthiness. Additionally, [21] noted in his research that:

"news elements influence the reporting and editing process from start to finish and include not only the selection of news, but also decisions about the importance given to a storey" (p. 74).

According to Boukes, Jones, and Vliegenthart [22], there are a variety of reasons to consider a problem newsworthy, including the issue's negative or damage, its closeness, continuity, and degree of dispute. When a storey is deemed noteworthy, it will be prominently featured in the media on a regular basis. Additionally, the media plays a critical role in educating the public about health dangers, as there are boundless uncertainties and risks associated with communicable diseases. To effectively combat these threats, the media's responsibility is to persuade the public to alter their behaviour [23].

Similarly, the Malaysian government and the media have been adept in informing the country about immunisation and the NIP. Malaysia's vaccination coverage for vaccine-preventable diseases such as polio, measles, and hepatitis B was 99.04 percent, 93.07 percent, and 99.27 percent, respectively, between 2015 and 2017. While Malaysia has made enormous strides since the introduction of vaccination in the 1950s, the presence of anti-vaccine parties has kept the country from achieving 100 percent vaccination efficiency, resulting in multiple outbreaks in recent years. As a result, the Government has directed the media to promote additional health programmes to re-establish public

confidence in the vaccination programme [2]. Additionally, the news media has been shown to provide objective and informative coverage of vaccination campaigns [7].

Newspapers, being the primary source of information and public opinion, are tasked with dispelling anti-vaccine myths. Recent outbreaks have resulted in increased positive coverage of vaccination [10]. Pro-vaccine discourses are frequently published as editorials and columns, but seldom as hard news, because "news organisations can create the normative terms of a social issue or problem by taking a position and announcing their status as a debate participant" [4, p.33]. Additionally, because parents are ultimately accountable for their children's vaccination decisions, prior news coverage of vaccine-preventable disease outbreaks has been found to disproportionately target parents, rather than the public or anti-vaxxers [4, 10].

Anti-vaxxers and anti-vaccine movements, on the other hand, are frequently portrayed as a threat to the entire community. Additionally, numerous studies have labelled anti-vaxxers as "activists." Even though some members of the movement are practising health authorities, they have never been covered by the mainstream media. Additionally, researchers agreed that many publications have portrayed anti-vaxxers as "criminals" who endanger public health [4]. Additionally, anti-vaxxer news reports are frequently used to refute pro-vaccine medical and scientific assertions. These counterarguments promote theories and claims to weaken vaccination's legitimacy [4, 10].

### 3. Theoretical Framework

To fully understand how the news media in Malaysia conceptualise and frame the rampant issue of anti-vaxxers, this study has employed the framing theory developed by Robert Entman. As the media have an educative role in disputing anti-vaccine sentiments, this study is interested to look at the media framing of anti-vaxxers. According to Entman [24], to frame is:

"to select some aspects of perceived reality and make them more salient in a communication text, in such a way as to promote a particular problem definition, causal interpretation, and moral evaluation, and/or treatment recommendation for the item described" (p. 52).

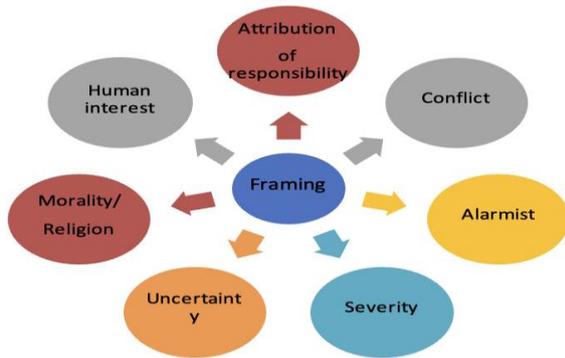
It is important to point out that this theory does not focus on media effects. Instead, it focuses on the media construction of issues whereby the media will select several themes to be included in the news production of certain issues [25].

Framing theory has been used in health communication research. For instance, research conducted by Sualman and Alam [26] examined how H1N1 was framed in Malaysian newspapers. The study concluded that Malaysian newspapers primarily used three frames: informativeness, awareness promotion, and education. In

another study, framing was utilised to examine the sources in front-page media reports about Coronavirus Disease 2019 (COVID-19). The study discovered that newspapers frequently quoted non-political national authorities such as healthcare officials, national political entities such as the Health Ministry, and foreign political entities such as foreign research organisations on their front pages [27].

Figure 2 shows the theoretical construct of framing. According to Entman [24] the media influences the public’s perception and decision-making process through framing. To answer the fifth research question on how Malaysian newspapers frame anti-vaxxers, this research has employed seven elements of framing namely, *attribution of responsibility, morality/religion, uncertainty, severity, alarmist, human interest, and conflict*.

**Figure 1: The Elements of Framing**



The frames utilised in this research are based on Dan and Raupp's [27] and Ogbodo et al's [28] studies, as well as the researcher's personal analysis of newspaper stories. Dan and Raupp [27] conducted an evaluation of the framing of health hazards in 37 distinct studies. Meanwhile, Ogbodo et al. [28] did study using the news framing of COVID-19, which is likewise recognised as a health concern. Both studies identified multiple distinct ways in which global media frame health threats, but because Ogbodo et al's [28] research is more recent, the researchers included the morality/religion frame in their observation. According to this research, anti-vaxxers are a major global health threat because they expose the public to vaccine-preventable diseases that are lethal and extremely infectious. As no earlier deductive research has been undertaken to specifically frame anti-vaxxers as a health risk, this research incorporated the framing of various health hazards from both studies into the study's structure and framework.

**4. Methodology**

To address the research questions, this study used a quantitative content analysis approach. Quantitative content analysis is a research technique in which researchers categorise and analyse textual or visual sources in a systematic manner. This research technique is extensively

used in communication research and entails the process of coding for the goal of analysis [28]. Four Malaysian newspapers were selected for this study: The Star, New Straits Times, Berita Harian, and Harian Metro. They were published between 1 January 2019 and 30 September 2021. The 43-month period offered adequate data for analysing reporting trends. The primary reason for adopting a 43-month time period was to analyse the effects of a newly discovered pandemic on media coverage trends.

These newspapers were chosen over others in the area due to their large audience and systematic online archive documents, as shown in Table 1.

**Table 1: Description of Sampled Newspapers**

Newspaper	Readership	Number of news coded
<i>The Star</i>	1,185,000	137
<i>New Straits Times</i>	1,400,000	63
<i>Berita Harian</i>	1,180,000	51
<i>Harian Metro</i>	2,400,000	36

An online search in the archives of the four newspapers originally presented 800 articles under the keywords “anti-vaxxers”, “anti-vaccination”, “anti-vaccine”, “vaccine hesitant”, “antivaksin”, “anti-vaksin”, “anti-vaksinasi”, and “keraguan vaksin”. However, the researcher decided to discard paid articles, articles that only made a passing reference to anti-vaxxers, and articles that did not have any reference to anti-vaxxers. This step was to ensure that the data collected was of variety and was representative of the sample. This led to only 287 articles for the analysis.

This study has employed a deductive approach in content analysis whereby the researcher predetermined the frames into several categories that can be compared with, so that the identification of framing and trends of reporting will be verified. According to this approach, the researcher must identify all possible frames in advance so that any possible frames will not be overlooked. This research has also employed priori coding where the categories of coding will be predetermined prior to data collection based on a conceptual and theoretical rationale [30]

The frames used in this research were constructed based on Dan and Raupp [27] and Ogbodo et al.'s [28] research on the framing of health risks. The frames are adopted in this research as it studied a similar situation: health risks and threats to the community. News frames refer to how newspapers report anti-vaxxers as different newspapers have a different inclination to emphasise certain conflicts and information based on the editor’s measurement of its newsworthiness. The list of operational definition of coding items in this study are listed in the table below:

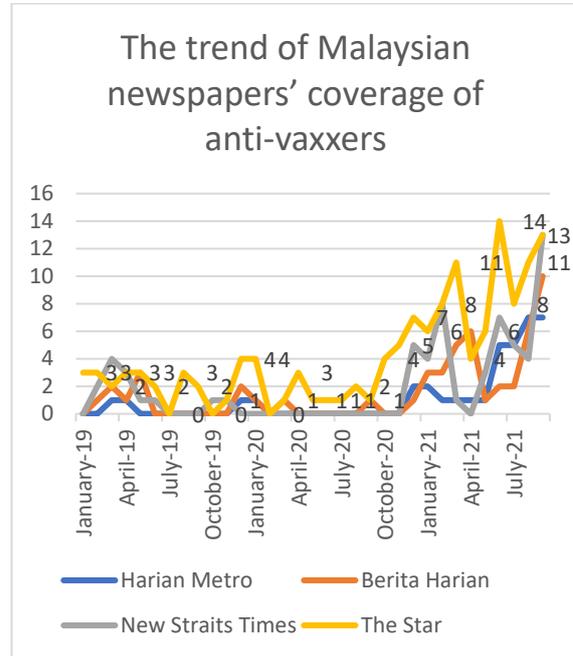
**Table 2: Operational Definition of News Frames**

News frame	Definition
Attribution of responsibility	Attributing responsibility of a cause or solution of an issue to an individual or a specific group
Morality/Religion	Putting the context of an issue in a religious or morality perspective or tenets
Uncertainty	Too little is known about an issue
Severity	The consequence and impact of a health risk
Alarmist	Exaggeration to cause panic or invoke fear
Conflict	Emphasising conflicts to evoke interest of audience such as conflicts between an individual and the Government
Human interest	Attributing a human face or appeal emotionally towards a conflict/issue

**Findings**

The first research question asked about the trend of Malaysian newspapers’ coverage of anti-vaxxers. Based on the dates of the news articles, the trend of coverage over the span of 43 months was studied. The findings are simplified into a line graph in Figure 2.

**Figure 2: The Trend of Malaysian Newspapers’ Coverage of Anti-vaxxers**



5.

The WHO declared anti-vaxxers a public health hazard in 2019 [1]. Despite this, the findings indicated that Malaysian newspaper coverage of anti-vaxxers remained restricted, averaging roughly two to three pieces per month in 2019. This demonstrated that the Malaysian media considered the country's health concern as being under control. This self-assurance from the media remained despite two distinct occurrences in West Malaysia in 2019: (a) a set of parents' anti-vaccine attitude resulted in the death of their two-year-old son from diphtheria, and (b) a cluster of polio infection involving 23 patients was detected. Both instances were resolved, and the Health Ministry began stepping up efforts to avoid other infections using acute flaccid paralysis surveillance (acute symptom similar to polio) [31]. As a result, the Malaysian media paid scant attention to the anti-vaccine debate in 2019.

This tendency remained for the most of 2020, but the data indicated a surge in the trend of publications beginning in November 2020, coinciding with the start of the COVID-19 vaccine. COVID-19 is a highly contagious and fatal infectious disease that has been declared a pandemic for 2020. Infected individuals with the airborne virus frequently exhibit flu-like symptoms. However, because the virus is unusual, some individuals who are infected also get respiratory ailments, and some symptoms are severe enough that the infection could end in intubation or death. As new viral variants with increased infection rates emerge, like as the Delta variant, scientists have stated that vaccination is the world's best option for avoiding the spread of the disease; however, this prevention will be harmed if there are anti-vaxxers [32]. Malaysia's government took the first step toward vaccination in November 2020, when it signed a contract to purchase the Pfizer vaccine [33]. To support the Government, a rush of

articles has begun to ensure that the community is safeguarded from the threat posed by anti-vaxxers, as Malaysia's fourth wave reaches a peak of 2,1888 new daily infections in November 2020 [34]. From June to September 2021, the media increased its coverage of the government's initiative to expand vaccination access. Anti-vaxxers continue to be a problem in Malaysia, as just 60% of the overall population had received their vaccine doses by the end of September 2021 [35]. Thus, the media released a variety of pieces to promote vaccination and to educate the public about anti-vaxxers as a public health issue. Additionally, there appeared to be a disparity in the number of articles published on anti-vaxxers by the four publications.

The second research question queried about the frames newspapers use when reporting about the antivaxxers. Table 3 details the findings:

**Table 3: The news frames used by Malaysian newspapers in reporting anti-vaxxers**

News Frame	Harian Metro	Berita Harian	New Straits Times	The Star	Total
Attribution of responsibility	6 (1.75%)	13 (3.79%)	16 (4.66%)	23 (6.7%)	58 (16.9%)
Morality/Religion	4 (1.16%)	8 (2.33%)	8 (2.33%)	3 (0.85%)	23 (6.67%)
Uncertainty	6 (1.75%)	9 (2.62%)	1 (0.29%)	2 (0.58%)	18 (5.24%)
Severity	5 (1.45%)	11 (3.24%)	14 (4.08%)	36 (10.5%)	66 (19.3%)
Alarmist	11 (3.24%)	11 (3.24%)	18 (5.25%)	65 (19%)	105 (30.7%)
Conflict	4 (1.16%)	7 (2.04%)	17 (5%)	26 (7.58%)	54 (15.8%)
Human Interest	3 (0.85%)	1 (0.29%)	4 (1.16%)	11 (3.24%)	19 (5.54%)
Total	39 (11.4%)	60 (17.6%)	78 (22.8%)	166 (48.4%)	343 (100%)

Interestingly, given the threat of the anti-vaxxers on communal health, the media depicted them accurately by relying on the alarmist frame to induce fear of the anti-vaccine groups. The results of the study found that anti-vaxxers were typically associated with the labels “conspiracy theorists”, “propaganda”, and “fake news”. This indicated that the newspapers tried to be persuasive by describing the anti-vaxxers in simpler words that raised red alarms in the community. The alarmist frame was not a mere attention-grabber for the newspaper, however, the frame was utilised to benefit the community and to invoke the audience’s interest in reading informative articles on anti-vaxxers. Additionally, the sources of the article were already verified, hence there was no exaggeration within the frames. Examples of the use of the alarmist frame are recorded in Table 4.

**Table 4: Alarmist news frames excerpts used by Malaysian newspapers in reporting on anti-vaxxers**

Newspaper	Date	Title	Excerpt
<i>The Star</i>	8/12/2020	“Counterin g the vaccine scare”	“...as the anti- vaccine group spreads its bogus science, the scare grows.”
<i>New Straits Times</i>	8/8/2021	“When treatmen t from a shaman is favoured over modern medicine ”	“What they see is ‘54 per cent of the clusters came from manufacturin g” and nothing else. These people may well be closet flat- earthers and anti-vaxxers too because they only believe things that align with their blinkered worldview that might as well have been taken from a children's fairytale.”

Furthermore, the findings also indicated that *Berita Harian* and *New Straits Times* chose a similar approach to reporting as both of the newspapers share the same in-house styles preferred by their same parent company. Both newspapers could be seen to report a lot of the religion/morality frame, which doubled that of the other two newspapers. The reason being was that the readership of the newspapers is mostly the

suburban, Malay community. As Islam is the official religion of Malaysia, the newspapers quoted a lot of local *muftis* and Muslim religious experts to counter the anti-vaccination messages. As all of the Malays are Muslims by law, they understand that religious beliefs cannot be countered. Therefore, the Malay newspaper took the religious and morality route to report on anti-vaxxers so that their Malay audience would be influenced to reject the un-Islamic anti-vaccination messages. An example of the newspapers framing anti-vaxxers can be seen in the following news excerpt from *Berita Harian* dated 25 March 2019 entitled “*Antiilmu punca tolak vaksin, bumi bulat*” (Translation: “Anti-science is the cause of vaccine rejection, the earth is round”):

*“...golongan ini disifatkan sebagai jahil murakkab, iaitu berada dalam keadaan tidak sedar bahawa terdapat banyak perkara yang tidak diketahui.”*

(Translation: “... this group is described as *jahil murakkab*, that is, being in a state of unawareness that there are many things that are not known.”)

On the other hand, English newspapers used the severity frame more than the Malay newspapers to share the grave threat the anti-vaccine movements hold. The anticipated reason for the extensive coverage was the urban and suburban communities being denser in population; hence, there could be more anti-vaxxers looming around within this community. Novak [36] pointed out that a study by the National School of Tropical Medicine at Baylor College of Medicine concluded that higher-income areas with higher education rates have more anti-vaxxers as first, anti-vaccination messages are easily accessible online and second, these more educated and richer people are able to network with like-minded people online. Furthermore, the research also revealed that this might be the reason why the United States has a low vaccination rate. Hence, the English newspapers attempted to comprehensively educate their audiences on the dangers and threats of the anti-vaccine movement to public health, which might lead the community to death.

## 6. DISCUSSION

Malaysian newspapers' coverage of anti-vaxxers has ranged between zero and one article per month on average since the WHO announced in 2019 that anti-vaxxers are among the top ten public health dangers. However, with the emergence of a newly discovered virus called COVID-19 that has worsened into a pandemic and the vaccination being viewed as the only means of prevention, the Malaysian media has focused more on the topic of anti-vaxxers. This is consistent with Pan and Meng's [23] research, which found

that the media primes health hazards to persuade the public to change their behaviour and avoid exposure to certain health threats. This priming is necessary because the public has a collective obligation to ensure the safety and health of their neighbourhood. However, in discussing the rise of anti-vaxxer coverage, the media also promote a pro-vaccination discourse, in which the media build a good picture of vaccines, rather than addressing anti-vaxxers as a health problem. Anti-vaxxers are frequently cited towards the conclusion of reports without any counterarguments against vaccines, however they are typically described in a single word or in between the lines. Anti-vaxxers are rarely openly acknowledged or defined in their entirety. This emphasis on vaccination positive in stories is consistent with Greenberg et al' s[9] conclusion that media coverage of recent outbreaks promotes vaccine optimism. This dearth of vaccine counter-arguments, however, contradicts Capurro et al's [4] research, which demonstrates that anti-vaccination coverage is a vital counter-argument to vaccination when discrediting scientific claims. While there are instances of this type of news, they are insufficient to generalise in the study because the Malaysian media does not provide anti-vaxxers with any "screen time."

English and Malay newspapers provided unequal coverage. English newspapers are perceived to provide a broader coverage of anti-vaccination issues because their viewers are more vulnerable to anti-vaccine propaganda, with anti-vaxxers being vocal members of social networking sites that are nearly always accessible to English newspaper audiences. However, it should be noted that this unequal distribution will shield Malays, low-income earners, and the rural populace who read Malay publications from the harshness and dangers posed by the anti-vaccination community. It should be highlighted that anti-vaxxers do not have a face, which means that the public cannot recognise them immediately. Additionally, the anti-vaccination movement dates all the way back to the 1800s, indicating that anti-vaxxers do not rely solely on social media platforms to promote their message. As a result, the rural Malay newspaper audience will almost certainly be exposed to anti-vaccination messages as well. As a result, the Malay newspapers' scant coverage of anti-vaxxers as a pressing problem will do little to assist the Government's vaccination effort. This means that the Malaysian media only fulfils a portion of its responsibility to inform and educate the people. Newspapers aim to warn the public about anti-vaxxers by framing reports in an alarmist manner to instil fear or terror in the group. As such, the use of this frame is consistent with several research findings [4, 27, 28] that the alarmist frame is one of the most prominent frames used to communicate health hazards. Additionally, Capurro et al. [4] research referred to anti-vaxxers as "criminals" and "activists," both of which carry a negative connotation. This negative connotation is consistent with the findings of the current study, as Malaysian media frequently refer to anti-vaxxers as "conspiracy theorists" and "propagandists." These terms indicate that the media is employing a sort of

sensationalism, as sensationalism arouses the audience's emotions and causes the subject to stay in their minds.

However, the Malaysian media's sensationalism approach implies that they avoid debating the scientific and medical components and opinions on this public health danger. This dearth of other perspectives is related to the fact that anti-vaxxers receive scant coverage and statements from research organisations and frontline workers. Malaysian media outlets have been known to state categorically that anti-vaxxers constitute a public health hazard but have failed to explain why they are deemed to be such based on scientific evidence. As a result of this weakness, the media are writing to cause alarm rather than to educate. While instilling fear in the public will ensure that they pay attention to this issue, a lack of information will only serve to confuse people, particularly over the seriousness of the crisis. The dangers posed by anti-vaxxers have resulted in mortality in recent years; if the media does not write to educate, such a situation may become a recurring one in the future. The framing theory demonstrates that the Malaysian media continue to pay scant attention to the issue of anti-vaxxers.

The media, on the other hand, has boosted coverage in recent years by speaking in a way that attracts the public's attention; by scaring the people. Theoretically, framing has aided the researcher in comprehending how anti-vaxxers are discussed. The framing is concerned with the media's construction of issues, in which the media chooses which issues to highlight and which to conceal. Thus, based on the debate above, it can be determined that Malaysian media outlets are performing their function of informing and educating. However, there is still potential for improvement to guarantee that the media are executing their duties effectively and contributing to the success of the Malaysian National Immunization Program, which aims to eradicate vaccine-preventable diseases and address anti-vaxxer concerns.

## 7. Conclusion

This study examined how Malaysian newspapers portray anti-vaxxers as one of the top ten public health dangers. The findings of this study indicate that Malaysian media outlets are effectively informing and educating the public about the presence of anti-vaxxers. However, there is still room for improvement. To begin, it should be recognised that coverage would increase only in the presence of a threat. Despite the WHO's warning about anti-vaxxers' dangers, the Malaysian media initially failed to take sufficient measures to educate the public about them.

As the principal source of information charged with the responsibility of educating and informing the public about a variety of topics, the media should continually report on any threat to the public. This is to ensure that the public is aware of the dangers that anti-vaxxers represent to the community and that the former are not swayed by anti-vaccination rhetoric spread online.

Currently, the media appears to report on anti-vaxxers

only when there are incidents, indicating that the media make little attempt to prevent the public from being swayed by anti-vaccination messaging. Thus, the media should take a stand and publish further editorials and issue coverage pieces about anti-vaxxers, describing their modus operandi and the messages they express. Additionally, the media should establish credibility with the public by collaborating with and mentioning more health experts from research institutes and universities. This relationship development is necessary to guarantee that research entities have a voice in communicating their credible research and information to the public, providing the public with a source of scientific and accurate information on which to base their health decisions.

## 8. Acknowledgements

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