

## Framing the Initial COVID-19 Outbreak: Analysis Of BBC News and CNA Broadcast News on Youtube

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### Abstract

The COVID-19 pandemic presented an unprecedented global health crisis, placing tremendous pressure on news media to effectively communicate the outbreak amid significant uncertainties. This study investigates how *BBC News* and *CNA* YouTube channels framed the initial phase of the pandemic, from the first coverage of the outbreak to reports of the first community transmission. Guided by framing theory, discourse analysis, and multimodal analysis, an inductive qualitative content analysis was conducted on 27 news clips from *BBC News* and 87 from *CNA* YouTube channels. The findings revealed stark differences in framing strategies. *BBC News* predominantly categorized the initial outbreak as a localized health and humanitarian crisis in China, distancing the United Kingdom from the narrative. The narrative was further augmented by the recurring visual motif of Asians wearing facemasks, implicitly conveyed the message of difference between them and us. Conversely, *CNA* constructed the initial outbreak as a shared regional threat to Asian countries, emphasizing Singapore's vulnerability and multifaceted response. Via contextualizing COVID-19 alongside Singapore's 2003 SARS experience, *CNA* highlighted institutional preparedness and called for public compliance with policies. The findings of the study reveal how European and Asian media adopt distinct strategies in framing emerging health crises, reflecting broader socio-political narratives. As nearly five years have passed since the COVID-19 outbreak, this work provides a timely opportunity to reflect on lessons learnt and to inform future media strategies for reporting public health emergencies. These insights offer practical guidance for media professionals, facilitating balanced, culturally sensitive, and accurate health communication strategies.

**Keywords:** News Framing, COVID-19 Outbreak, BBC News and CNA, YouTube Channels, Health Communication

## Introduction

Media coverage of initial stage of any disasters or crises are crucial for emergency management (Nazione, Perrault, & Pace, 2021; Ng, 2023; Zhao & Wu, 2021). When there is little or no prior knowledge of the risks, the way renowned news media present and construct the issue play critical roles in setting the tone for how the public perceive and respond (Chou & Britt, 2024; Hubner, 2021). The COVID-19 pandemic is an unprecedented public health emergency which claimed millions of lives worldwide and changed societies in ways that no other health crisis had done in decades. Apart from national health organizations, news media undoubtedly played significant roles in impacting how citizens worldwide perceived the risk of COVID-19 and their subsequent health behaviors (Hubner, 2021; Lyu & Takikawa, 2022). As the world has been living with COVID-19 for more than four years and nations return to pre-pandemic normalcy, there remains urgent need to reflect on its media coverage, especially during the initial outbreak amid intense uncertainties (Nazione et al., 2021). To consolidate lessons learned and better prepare for future pandemics, questions like what are the distinctive linguistic and visual traits in the media representations, how different cultural contexts affected the coverage, and what are the commonalities and distinctive features, need to be answered (Chou & Britt, 2024; Maloney, White, Samuel, Boehm, & Bleakley, 2023). To this end, this study examined the framing of the initial COVID-19 by British news outlet *BBC News* and Singaporean news media *CNA*.

YouTube platform was selected to examine media coverage of COVID-19 on influential social network sites. Ranking the second most popular social media behind Facebook, YouTube has been on the way to becoming an essential health information source, especially during public health emergencies (Liu & Kim, 2011; Ng, 2023; Statista 2024). However, compared to the large number of health-related studies conducted on other social media such as Facebook and X (formerly known as Twitter), studies on the framing practices on YouTube are sparse and limited. Existing studies primarily focused on the evaluation of the accuracy of the contents (Basch, Basch, Ruggles, & Hammond, 2015; Nagpal, Karimianpour, Mukhija, Mohan, & Brateanu, 2015; Pandey, Patni, Singh, Sood, & Singh, 2010). The evolving media landscape characterized by traditional news outlets transitioning to YouTube and attracting millions of followers, along with the fact that social media users tend to appropriate, modify, and amalgamate content from traditional broadcast news in their posts (Chou & Britt, 2024; Zhao & Wu, 2021), underscore the necessity of investigating framing practices by national news outlets on YouTube. Meanwhile, as information becoming more and more visually mediated and consumers getting used to digesting visual news in recent years, scholars claim that it is crucial to enhance news consumers' visual literacy to understand implications embedded and navigate the complexities in visual-based communications (Bock, 2020; Kress & Van Leeuwen, 2021). Drawing on insights from multimodality studies, this study attempts to provide a clear picture of how visuals are employed to construct the COVID-19 outbreak on *BBC News* and *CNA*. It aims to examine not only the way COVID-19 is being constructed, but also how linguistic features interact with visual semiotic means in constructing meanings, as well as summarizing similarities and different emphases. Many professionals can benefit from this study, in particular, news media practitioners, emerging infectious diseases (EIDs) communication advocates, and news consumers. It can also enrich news framing theory and risk communication studies by providing empirical evidence and further understanding of framing of health emergencies.

*News Framing and Covid-19*

Framing has its roots in sociology and psychology (Borah, 2011; Scheufele & Tewksbury, 2006). The sociological root can be traced back to Goffman where he proposed that frame analysis is the study on the organization of social experiences (Goffman, 1974). This approach conceptualizes frames as being imposed by powerful institutions or individuals to impact how people understand and interpret the experience and world around them (Borah, 2011; Goffman, 1974). The psychological approach categorizes frames as existing in individuals' mind and offer cognitive shortcuts to process information and form opinions (Scheufele & Tewksbury, 2006). Framing theory has been employed as the theoretical guidance across disciplines, which include but not limited to media studies (Luisi, Barker, & Geana, 2018), political science (Chung et al., 2021), psychology (Dhanani & Franz, 2021), linguistics (Rohela, Bhan, Ravindranath, Bose, & Pathare, 2020), and health communication studies (Pieri, 2019). Increasing studies suggest that framing of health issues on social media are on the rise in recent years (Luisi et al., 2018; Wiedicke, Reifegerste, Temmann, & Scherr, 2022).

Currently there are a number of knowledge gaps in the understandings of news framing practices of emerging infectious diseases (EIDs) in general and COVID-19 in particular. First, regard EIDs news framing practice, perspectives from Asian countries are generally under explored (Zhao & Wu, 2021). The Global South is constantly in the position of being constructed and represented rather than having their voices being heard and their perspectives being recorded (Sastry & Lovari, 2017). Thus, it is important to investigate how Asian news media responded to and framed the COVID-19 from the outset. Second, the review of literature suggested that visual elements are generally understudied compared to verbal contents in framing studies (Bock, 2020; Brennen, Simon, & Nielsen, 2021; Matthes, 2009). This might be due to the fact that framing studies seem to concentrate more on textual representation while visuals are largely being ignored (Dan, 2018; Mello, Glowacki, Fuentes, & Seabolt, 2023). Analysing broadcast news coverage without exploring visual components would miss vast amount of information and implications, and the analysis itself is less accurate and comprehensive (Bock, 2020; Matthes, 2009). The goal of the present study is to fill the research gaps and enrich studies on news framing in health communication.

Published studies on framing of the COVID-19 have been conducted from various perspectives. First, a number of studies examined the influence of rising nationalism and populism on the news representation of COVID-19. Many drew the conclusion that COVID-19 had been politicalized to suit political interests (Chung et al., 2021; Hart et al., 2020). Second, plenty of studies examined news framing practice in one nation or conducted comparative studies in cross-national settings to how the issue was constructed. Within these studies, some revealed that political orientation of the media outlet is a major determinant of how COVID-19 was framed (Capurro, Jardine, Tustin, & Driedger, 2021; Wallace, Lawlor, & Tolley, 2021). A couple of studies confirmed the correlation between the emphasis on blame in COVID-19 coverage and the occurrence of racist attacks against minority groups in some countries (Dhanani & Franz, 2021; Sun, 2021). Third, several studies investigated the rhetoric of COVID-19 media representation. For instance, Rohela et al. (2020) investigated the use of war metaphors in India national print media. Jia and Zhao (2023) combined pragmatics with fear appeal strategies to explore public sign on COVID-19 prevention in some Chinese communities. Jafri and Ariffin (2021) used linguistic agency assignment to examine news headlines in Malaysian news outlet *The Star Online*. Lastly, an increasing number of studies

concentrated on the framing practice of some international health organizations and national health institutions on social media like Facebook and X (Brennen et al., 2021; Wicke & Bolognesi, 2020). The analysis on the framing of misinformation circulating social media has also been an area of scholarly interests in recent years (Brennen et al., 2021; Cinelli et al., 2020).

Recent studies on news coverage of COVID-19 in the beginning of the outbreak revealed that the manners traditional news outlets framed the issue impacted individuals' perception of the risk, their subsequent behaviors and even the authorities' responses (Chou & Britt, 2024; Nazione et al., 2021). More specifically, if from the start the coverage presented the outbreak as personally relevant and supplemented by sufficient preventative measures, the public is better positioned to respond effectively (Capurro et al., 2021; Chung et al., 2021). Conversely, sensational and politicalized coverage concomitant with stigmatizing imageries may contribute to public panic, misunderstanding of risks, and even provoking discriminatory behaviors (Chung & Jones-Jang, 2022; Hart et al., 2020).

## **Methodology**

### *Research Questions*

RQ1. What are the dominant frames utilized by *BBC News* and *CNA* YouTube Channel in covering the initial COVID-19 outbreak?

RQ2. What are the linguistic and visual features of the frames?

RQ3. What are the distinctions and commonalities in the coverage of the initial COVID-19 outbreak on the two news outlets?

### *Research Design*

Early days news coverage on sudden health emergencies have been recognized as crucial and essential to help broadcast warnings, call for swift responses, and engage citizens in taking preventive measures, thus influencing population health and welfare (Lyu & Takikawa, 2022; Mello et al., 2023). Follow previous studies and recommendations from the World Health Organization (WHO), the study defined the initial outbreak as the time between the first report of COVID-19 and the first coverage on community transmission in the home country of the United Kingdom (U.K.) and Singapore (Humphries et al., 2017; Pieri, 2019; WHO, 2020). During this time, most infections were in China with minimal perceived risks in both outlets' home countries, and the public started to gather information from trusted sources to establish their perception of the situation (Chou & Britt, 2024; Hubner, 2021). Hence, the way in which national news media framed the issue became more crucial.

*BBC News* and *CNA* were selected as representatives of European and Asian news media perspectives, respectively. The two outlets champion different sets of value and cultural influences. *BBC News* promotes Western values of freedom and individualism, offering a lens for European media practices (Cushion, 2022; Kasmani, 2014). *CNA* emphasizes conformity and collectivism, often focusing on regional issues and reflecting Asian cultural heritage (Feng et al., 2012; Lee, 2005). Moreover, both outlets maintain an active presence on YouTube platform, each boasting millions of subscribers. Coverage by these globally oriented news media can reach a large amount of population and is more likely to impact health behaviors worldwide (Knüpfer & Entman, 2018).

### Data Collection

Data were collected by accessing specific coronavirus pandemic playlists on the respective YouTube channels. Based on the categorization of the initial outbreak, the investigation period was from January 21, 2020, to February 9, 2020 (20 days) on *BBC News*, and span January 20, 2020, to February 3, 2020 (15 days) on *CNA*. The researchers downloaded all publicly available videos uploaded during this time, filtered out duplicates and inaccessible videos due to privacy settings, resulting in a sample of 114 news clips (27 from *BBC News* and 87 from *CNA*). The data size was deemed appropriate since the average length of clips on *BBC News* was around 3 times longer clips from *CNA*. Clips featuring the full livestream of government press briefings were excluded to maintain a focus on media discourse. As a result, 29 clips from *CNA* were excluded, resulting in 85 news clips (27 from *BBC News* and 58 from *CNA*) as the final data.

### Coding Procedures

This study utilized an inductive qualitative thematic analysis to perform framing analysis on a corpus of news clips from *BBC News* and *CNA* YouTube channels, concentrating on the initial COVID-19 outbreak. The unit of analysis was each news clip. Following scholars in framing analysis who claim that frames encompass a number of themes and the relations among those themes (Guenther et al., 2020), the researchers first coded individual themes, and then classified relevant themes into theme clusters. Dominant frames were extracted on the basis of these theme clusters using Entman (1993) four functionalities of frames as the operational guidance. Entman (1993) proposed that frames serve to define problems, offer causal interpretations, provide moral evaluations and recommend solutions. Thus, if the theme clusters fulfilled one of the four functionalities, the researchers confirmed the existence of a frame in the coverage. The coding process was iterative, starting with the identification of more obvious themes and progressively on more subtle ones, facilitated by the qualitative software *NVivo 12 PLUS* and Microsoft Word. Figure 1 illustrates the process. To better understand the linguistic and visual features of the coverage, data were examined several times to detect framing devices such as lexicons, symbols, visual imageries, and emotional appeals.

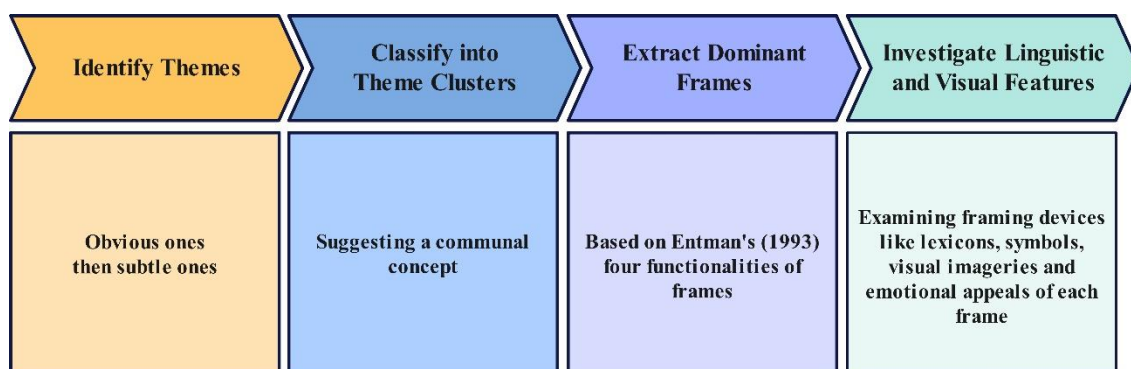


Figure 1: The analysis process from theme to dominant frame

### Intercoder Reliability

Two coders were involved in the study to check the reliability of the coding process and results. Coder A has a doctoral degree in discourse analysis and health communication. She has conducted plenty of research on media analysis and discourse analysis in different settings. Coder B is doing research on discourse analysis, metaphor analysis and multimodal

analysis. The coders meet regularly each week for two-and-half-month to discuss themes that emerged in the data and resolve disparities in the coding process. Two other consultants who are university lectures on discourse analysis and linguistics also attended the meetings to assist in the process. To manage potential biases and ensure the replicability of the findings, potential ambiguities were resolved during the meetings.

### Findings

Research question one and two aimed at exploring the dominant frames, and linguistic and visual features of the news coverage. This study identified two dominant frames on each outlet, they are elaborated in the following session, while the linguistic and visual features are discussion under each distinct dominant frames. Table 1 summarizes dominant frames and their characteristics. *BBC News* predominantly employed a Chinese health crisis frame and a Chinese humanitarian crisis frame in its early-day coverage, both of which concentrated primarily on Chinese situations with very limited reference to potential transmission scenarios in the U.K. In contrast, *CNA* framed the initial outbreak through the Asian public health emergency lens and Singapore is under siege perspective. The former frame focused on situations in the broader Asian context, while the latter underscored the immediacy of COVID-19 threats to Singapore.

Table 1

*Dominant Frames on BBC News and CNA*

News Outlet	Dominant Frames	Themes	Lexicons	Symbols	Visual Imageries	Emotional Appeals
<b>BBC News</b>	Chinese Health Crisis Frame	Daily statistics; situation in China; dire situations inside hospitals; emptiness; contrast between empty streets and crowded hospitals	Deadly; fear; concern; overcrowded; ghost city	Chinese people wearing facemasks; overcrowded healthcare facilities	Chinese wearing facemasks; Overcrowded hospitals; contrasting imageries between empty streets and crowded hospitals	Fears and anxiety
	Chinese Humanitarian Crisis Frame	Disruptions to daily lives; restriction on free speech, public narratives; human rights violations; evacuation of foreign nationals	Disruptions; restrictions; fears; doubts; deserted; ghost city; drastic; draconian	Evacuation of foreign nationals	Empty streets, abandoned urban areas	Pessimism; fears; detachment

<b>CNA</b>	Asian Public Health Emergency Frame	Numerical and geographic spread of the COVID-19; measures adopted by Chinese and other national authorities; situations in China; scepticism towards Chinese authorities	Disinfection; prevention measures; temperature screenings; enhanced measures	High presence of health experts in the coverage or the studio; recount of SARS epidemic	Thermal screenings at Chinese transportation hubs; disinfection of public spaces; split-screen of hospital footage with close-up shots of medical experts	Fears and anxiety; Urgency
	Singapore is Under Siege Frame	Statistics in Singapore; measures implemented by authorities; education on the public; imperative necessity of immediate actions	Risks; precautions; socially responsible; cooperation	High presence of Singaporean government official, health experts; collective measures implemented by private sectors	Thermal screening at airports; medical experts receiving live interview; government officials come to news studio	Reassurance; Hope

*Chinese Health Crisis Frame*

This frame categorizes the initial outbreak as a localized health issue in China while downplaying its potential to evolve into a global outbreak. *BBC News* primarily adopted a detached observational stance, reporting health crisis in China rather than embedding it within a broader context of potential relevance to the U.K. The coverage emphasized daily updates on statistics and developments in China, using lexicons such as “deadly”, “ghost city”, “concern”, and “fear” to underscore the gravity of the situation. Visual representations frequently included repetitive image of Chinese people wearing facemasks, serving as symbolic depictions of the outbreak. These recurring visuals reinforced the perception of the crisis as culturally and geographically distant, further framing it as a localized phenomenon.

The theme of emptiness is prevalent under this frame, which refers to the desolation of normally bustling urban areas in China. Emptiness constructs the severity of situations in the city of Wuhan at three levels: rectifies fears people had with the sudden outbreak and connotes social isolation; highlights the enormous disruptions containment measures imposed on daily lives; and symbolizes the uncontrollable natural force and helplessness of human beings during the outbreak. Emptiness constitutes an escape narrative, suggesting that everyone in China is hiding in their homes and avoiding social contact. This theme is often demonstrated by verbal coverage explaining the population of Wuhan as 11 million but now

resembled a “ghost city”, completely “sealed off” from the outside world. Impactful visuals of empty spaces solidify the verbal framing and are effective in conveying the drastic change from a dynamic city to one at the standstill.

Grim realities are also constructed through the stark contrast between empty urban areas and overloaded healthcare facilities. The broadcast on January 25, 2020, on *BBC News* demonstrated this theme. It began with a video clip of China Media Group’s New Year Gala, a tradition in Chinese New Year’s celebration, which included cheerful visuals of fireworks and family reunions. The jovial imageries were shifted into a recorded video of an empty hotel lobby, though adorned with festive decorations, the atmosphere was cold and bleak. The voice-over narrated that “for some, the celebrations have begun. But in Wuhan, the epicentre of the outbreak of coronavirus, it looks more like a *ghost town*” (BBC News, 2020a). The footage was replaced by a bird’s eye view of one overpass, which was almost empty since only one car was featured. The visuals then changed to a reception hall inside one hospital with two receptionists in full body protective gear conducting their work, while the crowds behind them queuing in the main hall (see Figure 2). Although the contrasting imageries were self-evident, the narration described that “while the streets are empty, the hospitals aren’t, overwhelmed with potential cases” (BBC News, 2020a).



Figure 2: Contrasting image between crowded hospitals and empty streets on *BBC News*

In addition to the stark contrast between crowded hospitals and empty urban areas, another stable motif on *BBC News* is its visual representation of it being a Chinese health crisis. The visuals, to some extent, gave COVID-19 a human face – Asians with surgical facemasks. The network constantly merged Asian males and females in facemasks with the image of COVID-19 and China’s national flag together, creating a recurring motif symbolizing the outbreak (see Figures 3 and 4). According to Kress and Van Leeuwen (2021), the composition of an image integrates different visual elements to form a meaningful whole, influencing viewers’ interpretation through visual salience. Visual elements generally include colour contrast, position, size, and perspectives of the depicted elements. The most eye-catching visual element in Figure 3 is the surgical facemasks on the two Asian figures, emphasized by the strong colour contrast between the saturated blue and the soft hue of human skin. The central placement of human figures in the image also makes the facemasks more conspicuous and likely to capture attention immediately. Another salient element is the Chinese national flag since it is a “potent cultural symbol” that can be widely recognized (Kress & Van Leeuwen, 2021, p.211). The combination of different elements in Figure 3 suggests that COVID-19 is predominantly associated with Chinese, or people with Asian appearances, a



notion further supported by the caption “China Coronavirus”. However, it is noteworthy to state that *BBC News* is not exceptional in adopting terms like this to denote the initial outbreak. And the network stopped using it after the WHO officially named the disease COVID-19.



Figure 3: Chinese figures in facemasks as background image on *BBC News*

The saturation of an image can express nuanced, value laden meanings by suggesting different emotive temperature and intensities, and the effects can be strengthened by putting the image in distinct contexts (Kress and Van Leeuwen 2021). For example, the desaturated black and white image in Figure 4 disseminated a feeling of emotional depression and suggested a brooding atmosphere. It is apparent that the expressions on the four main figures' faces were also serious and gloomy. Put this into the context of a sudden novel disease outbreak where health facilities were being pushed to its knee with very limited existing knowledge about it, it is likely that such visual representations would induce fear and worry to audiences.



Figure 4: Desaturated background image on *BBC News*

In summary, the representation of Chinese and Asians being the face of COVID-19 in concomitant with the verbal contents revealed that *BBC News* characterized the initial

outbreak as essentially a localized Chinese problem rather than an emergency that the U.K. might be related to it.

#### *Chinese Humanitarian Crisis Frame*

In addition to framing the outbreak as a Chinese health crisis, *BBC News* further constructed it as a Chinese humanitarian crisis. This frame highlighted the disruptive impact incurred by rigorous containment measures while the pervasive sense of pessimism was illustrated by the prominent negative evaluations. Descriptive qualifiers such as “drastic”, “draconian”, and expressions like “disruptions”, “restrictions”, “fear” emphasized the situation. Aerial shots of empty streets deserted recreational centres showed that people were refraining from social interactions, which further echoed the escape narrative and created a strong emotional impact. However, the pervasive negative framing method disproportionately highlighted the adverse impacts of these nonpharmaceutical interventions while ignoring potential benefits.

Chinese humanitarian crisis frame centred on the narrative that healthcare resources were over-stretched in China and people cannot get necessary treatment. To illustrate this point, *BBC News* included several human-interest stories in China. One noticeable theme under this frame was the construction of repatriation flights. Evacuation of foreign nationals is a common response given the evolving situation of the initial outbreak and the responsibility of nation-states to safeguard their citizens (Şencan & Kuzı, 2020). However, *BBC News* employed horse-race metaphors and framed the arrangement as a competition among countries. This narrative added a sense of anxiety to the already intensified situation. For instance, they constructed foreign nationals stranded in China at that time as “trapped” and “in a chaotic race to get out”, as if the viral transmission was confined in China and that securing a flight seat was the solution to the crisis. The construction of foreign nationals trying to flee disease-stricken China echoed the Chinese health crisis frame and accentuated escape narrative, creating a sense of fear to the coverage. The following report on January 31, 2020, encapsulated this framing:

Wuhan’s medics are *locked* in a daily battle against this epidemic with infections still rising steeply. But for *trapped* British residents, at last a way out...In *a chaotic race* to get out, relieve for those who make it, further anguish and uncertainty for those who don’t. (BBC News 2020b)

Visuals accompanying the above narrative displayed some medical staff transferring an elderly Chinese man into an ambulance via a stretcher bed (see Figure 5). All medical staff were in full-body protective gear in daylight, and the elderly man was fastened to the stretcher bed by ropes despite showing no attempts to resist. This visual representation embedded the discourse into a frightening context and could convey a sense of horror to viewers. It is likely that visually impactful photos similar to Figure 5 can generate a heightened sense of anxiety about COVID-19, as reported in other studies (Mevorach, Cohen, & Apter, 2021). Moreover, combining fear-invoking real-life footage with metaphors of collapse and emotionally charged language could propagate the idea that the toll to stay in China was high and runaway was a sensible decision.



Figure 5: Man in a stretcher bed visual footage on *BBC News*

#### *Asian Public Health Emergency Frame*

Framing the initial COVID-19 outbreak as a shared crisis in Asia is the predominant method *CNA* adopted in its early day coverage. This frame categorized COVID-19 as originating in China yet closely related to other Asian countries, suggesting a shared regional challenge. This was illustrated by intense coverage on cases numbers in countries like Japan, South Korea, and Thailand. In addition to this, significant proportion of coverage was attributed to reports on border policies and measures at international airports. Coverage on *CNA* was action-oriented rather than solely relaying the unfolding of events. Hence, apart from updating statistical information, *CNA* prioritized message on collective containment strategies and actionable self-preventative measures that viewers can adopt. Predominant visual representations showcased thermal screening and disinfection of public areas at Chinese and international transportation hubs. These images not only underscored the severity of the situation but also reinforced the emphasis on proactive actions.

*CNA's* coverage categorized the initial outbreak as essentially a health crisis. The constant presence of health professionals and the prioritization of their voices contextualized the narrative in health-related topics and highlighted health professionals' crucial roles in the management of the outbreak. Visual representations also foregrounded the outbreak as a health emergency via background images featuring either the virus itself or healthcare professionals conducting their work (see Figure 5). Compared to visual representation on *BBC News*, these images avoided linking the COVID-19 to any specific ethnicities or nationalities and disseminated a sense of professionalism and dedication.



Figure 6: Visuals of COVID-19 background image on CNA

One distinctive characteristic about this frame on CNA is the visual presentation of hospital scenes. In media coverage of health crises, live footages inside hospitals are inevitable and are commonly featured, however, the ways such visuals were presented are crucial since it can potentially fuel undue fear and panic (Sun, 2021). Instead of showing full-screen alarming footage, CNA employed split-screen coverage to present footage inside hospital settings. This strategy usually juxtaposes hospital scenes with close-up shots of health experts, public health officials or the network's own Correspondents. Moreover, narratives accompanied the imagery often focused more on explaining the situation rather than sensationalizing or evoking emotions. The analysis also revealed that visuals on CNA were generally presented as evidence of verbal narrative or conveyed objective information such as crowded hospitals and medical personnel at work. They were less employed to suggest abstract meanings such as fear, isolation, loneliness and to elicit emotive responses.

The frequent invocation of the 2003 severe acute respiratory syndrome (SARS) epidemic is another distinguishing feature on CNA. In 2003, Chinese authorities were accused of covering up the initial outbreak for several months, and Singapore was among the few Asian countries that were severely impacted (Teo, Yeoh, & Ong, 2004). The recount of the experience served multiple functions, including scrutinizing the transparency and governance of the current outbreak by Chinese authorities. By referring to the SARS epidemic, CNA initiated discussions on whether Chinese authorities had learned from previous experience and managed the current outbreak with increased transparency. Moreover, the comparison of SARS epidemic with COVID-19 not only contextualized the COVID-19 within a historical framework of health crises in Asia but also underscored the evolution of response strategies and public health communication.

#### *Singapore is Under Siege Frame*

This frame concentrated on reporting multi-level defensive approaches implemented in Singapore against the initial outbreak. From the outset, CNA portrayed Singapore as being closely linked to the formidable viral outbreak in China, emphasizing the city-state's vulnerability. The narrative was further consolidated by contextualizing the threat of COVID-19 as on a similar scale to Singapore as the SARS epidemic.

The study identified four main themes under this dominant frame: updates on statistics and situations in Singapore, the readiness of effective coping strategies, the educational contents and advisories for the general population, and the urgency of the

situation by drawing parallel with the SARS epidemic. Lexicons such as “risks”, “precautions”, “socially responsible”, and “cooperation” underscored the narrative. Visual representations commonly included Singaporean officials holding press briefings, interviews with health experts, and thermal screenings in public areas in Singapore. These elements showcased the activeness of the authority, the reliance on health experts and scientific evidence, and the collective measures put in place in the country. *CNA* also covered extensively on healthcare protocols put in place in the country and included many health-related personnel in the newsroom to discuss the situation and containment strategies, ranging from top national officials to general practitioners. The detailed coverage on coping strategies, the inclusion of multiple experts’ opinions, and the direct communication with the general public offered a well-rounded view of real situations in Singapore.

This frame employed a holistic approach in addressing preventative strategies available at governmental, societal, and individual levels. First and foremost, it underscored the authorities’ obligation to safeguard its citizens, emphasizing their accountability through thorough coverage on domestic preparedness plans and measures. However, despite the substantial governmental efforts, the coverage indicated the potential for a widespread outbreak, highlighting the necessity of involvement and cooperation from the general public. Second, *CNA* included representatives from private sectors and industries, reporting on their precautionary measures and coping protocols. Third, the coverage also portrayed the public’s active action in following public health guidelines as a patriotic duty and linked to their national identity. Hence, the successful containment of COVID-19 on *CNA* was constructed as a collective responsibility shared by different groups of Singaporeans, with the overarching message that the authority, the industries, and the public should all collaborate to protect the nation from the viral spread. Moreover, the SARS epidemic was frequently referenced under this frame to contextualize the threat of COVID-19 as on a similar scale and emphasize its potential devastating impact, and to call for urgent collective response and public attention.

In summary, news framing of the initial COVID-19 outbreak on *CNA* was categorized as a shared Asian health emergency where Singapore was highly involved. Meanwhile, multiple levels of domestic defensive measures were highlighted.

#### *Distinctions and Commonalities*

RQ 3 explored the differences and similarities on the two outlets’ coverage, it was explained in the following session.

This study identified four primary areas of divergence. First, the fundamental categorization of the outbreak differed significantly. *BBC News* primarily defined it as a Chinese health and humanitarian crisis, focusing on Chinese situations, particularly on marginalized narratives. *CNA* predominantly constructed it as a shared regional threat in Asia and laid the bulk of its attention on domestic issues while remaining largely descriptive of Chinese situations. It was exemplified by the inclusion of many news stories that contradict official Chinese narratives on *BBC News* while *CNA* did not cover. For instance, the coverage regarding the controversies around the death of the whistleblower Dr. Li Wenliang.

Second, the source of information differed significantly. *BBC News* employed a mix of official and alternative sources, including unverified ones, sometimes enabling it to present stories that countered Chinese official narratives. *CNA* accessed a broad array of sources for reporting local situations – including interviews of government officials, health experts,

representatives from private sectors, and the public – its China-related coverage predominantly relied on information from Chinese authorities or the state media. They also relied heavily on message presented in Chinese official press briefings, whereas *BBC News* referred to them primarily for statistics.

The third difference lies in how the outlets constructed and evaluated Chinese authorities' containment measures and their impacts. Descriptors such as "draconian", "drastic", "disruptions", and "restrictions" demonstrated the negative evaluation of the measures on *BBC News*. *CNA* relays the situation rather than evaluating them. They reported on Chinese authorities "stepping up" and "tightening up" measures without offering moral judgements. Finally, the two outlets differed in their contextual use of the SARS epidemic in relation to the COVID-19 outbreak. *BBC News* primarily recounted SARS to explain the epidemiology of COVID-19. SARS was frequently referenced on *CNA* for two reasons: remind viewers of the cover-ups and cast scepticism regarding the management of the current outbreak; categorize the threat of COVID-19 as at a similar level to SARS and call for collective action.

However, it should be emphasized that the differences in the coverage may be attributed to geographical proximity and prior experiences with similar outbreaks, as Singapore is close to China and its experience with the SARS epidemic possibly sharpened its focus on the immediate threats of COVID-19.

The two outlets also shared similarities. First, both extensively updated viewers with the latest development, such as statistics, geographical spread, and epidemiological knowledge. These coverages are typical news reports during health crises and provided critical information as the outbreak unfolded. Second, both outlets closely monitored sentiments expressed by Chinese internet users, reflecting a broader journalistic trend of using social media to gauge public opinions (Mello et al., 2023). Lastly, both outlets initially placed high expectations on the WHO leading the global response to the outbreak, following extensively on its emergency meetings and cooperations with Chinese authorities. However, as the virus continued to spread and the WHO kept delaying some decisions, media attention from both outlets dropped markedly.

## Discussion

The present study explored the ways in which British news outlet *BBC News* and its Asian counterpart *CNA* framed the initial COVID-19 outbreak. We identified different dominant frames and summarized their distinctions and similarities. Our findings first suggest that *BBC News* disproportionately concentrated on documenting chaotic situations in China while excluded the U.K. from the narratives. *CNA* provided comprehensive coverage on efficacy information, such as domestic preventative strategies and personal protective guidelines. Based on studies on health messaging during emergencies and crises, we caution the way *BBC News* framing the initial outbreak might be problematic. According to the Extended Parallel Process Model (EPPM), a prominent framework in evaluating health messaging strategies and predicting health behaviors, if the public perceive the health threat as not personally relevant, it is unlikely that they would engage in adopting precautionary measures (Schneider et al., 2021; Witte & Allen, 2000). By constructing the virus as essentially a Chinese one, circulating in remote China and not unrelated to the British population, the coverage may send false

message to the British public about the risks. Moreover, extensive fascination with the disruptive and chaotic nature of the outbreak may distract public attention away from health-related issues. This finding is in line with Hubner's (2021) research on framing analysis on early COVID-19 national news coverage in the United States (U.S.), where media coverage focused more on the social impact of the virus rather than health risks and consequences. Furthermore, empirical studies testing EPPM confirmed that efficacy messages, such as information on personal protection methods and collective coping strategies, are among the strongest predictors of preventative behaviors during health crisis (Chou & Britt, 2024; Nazione et al., 2021). According to these studies, coverage in *CNA* which emphasized precautionary efficacy measures might be able to heighten public perception of risks and encourage preventive behaviors regarding COVID-19.

The second finding from our research is the construction of "otherness" of COVID-19 on *BBC News*. Throughout the investigation period in this study, the Chinese health crisis and humanitarian crisis frames constantly categorized the outbreak as a Chinese issue while excluded the U.K. from the narrative of the health emergency. This finding is consistent with other studies that suggest Western media tend to represent disease outbreaks as emerging from and spreading within "other" countries and ethnicities since "they" are different from "us" (Liu & Kim, 2011; Washer, 2004). The notions of "otherness" and disease from "outside" were not new concepts in Western media representation of infectious disease outbreaks, as Washer (2004: 2562) explained, the term emerging infectious diseases (EIDs), for Western readers is "emerging from the poor, in particular the poor in the developing world". Similar representations can be found in the U.S. print media coverage of the 2009 H1N1 pandemic where Mexicans were described as vectors of the virus (McCauley et al., 2013). Based on these findings, we propose that categorizing COVID-19 as a Chinese problem, may promote the notion of "otherness" and lead to the underestimation of risks among Western viewers. This, in turn, could hinder them from taking self-protective actions (Nazione et al., 2021; Schneider et al., 2021).

Our findings also revealed that coverage on *CNA* seemed to be less critical since the network mostly aligned itself with official Chinese narratives and remained oblivious of significant issues. Following official narratives without casting doubts fell short of revealing social implications and obscuring viewers from alternative narratives. Compared to the critical approach adopted by *BBC News*, this seemed to undermine the news media's crucial role in being the gatekeeper of those in power and offering critical insights to the public. This could in turn compromise the credibility of the coverage and damage public trust with the news outlet. This study cemented the proposition that news media should strive to provide comprehensive interpretation of the situation while remaining ethical and assisting viewers understand complexities involved in public health emergencies (Lyu & Takikawa, 2022; Zweig, Zapf, Beyrer, Guha-Sapir, & Haar, 2021).

In terms of visual representations, our results revealed significant differences: *BBC News* employed Asian faces to represent the initial viral outbreak, whereas *CNA* relied more on imageries of the virus and healthcare professionals. *CNA's* approach is more encouraging, given strong evidence suggested that exposure to stigmatizing coverage predicted discriminatory behaviors towards Asians during the COVID-19 pandemic (Cho, Li, Cannon, Lopez, & Song, 2021; Sun, 2021). *CNA's* split-screen strategy, which pairs footage of hospital

settings with health professionals is also great in adopting neutral visual imageries. The findings also revealed some controversial visual representations. First, while footage of healthcare facilities running over-capacity, patients lying in hallways may be effective in engaging viewers and emphasizing the severity of the situations, the sensational nature of them may incite undue fear rather than motivating behaviour changes. This is particularly problematic when excessive graphic visuals are accompanied with sensational language without parallel information on efficacy messages (Saxon, Bass, Wright, & Panick, 2018). According to fear appeal studies, emphasizing the severity of a health threat without providing efficacy measures may lead to unintended consequences such as defensive avoidance, message derogation, and even increased risk behaviors (Stolow, Moses, Lederer, & Carter, 2020; Witte & Allen, 2000).

This study yielded several implications for future pandemic journalism. First, news organizations should be aware of their role in informing the public of health risks while managing the potential emotions disseminated through the coverage (Saxon et al., 2018). It is recommended they work with health experts and other stakeholders in developing emergency messages and prioritizing multiple expert opinions. Particularly when using human figures to represent disease transmission, it is important to avoid pinpointing specific ethnicity and nationality. Second, it is advisable to use insights from fear appeal studies to guide coverage during public health emergencies. For instance, include ample message on efficacy information alongside coverage on the severity and susceptibility of health threats to encourage adoption of health behaviors (Nazione et al., 2021; Stolow et al., 2020). Third, in order to incorporate different perspectives, present comprehensive coverages and respond effectively during public health crises, cooperate between media outlets across cultural contexts is necessary (Lowrey et al., 2007).

## **Conclusion**

This study found significant differences in the way European news media *BBC News* and Asian news outlet *CNA* constructed the same sudden infectious disease outbreaks. *BBC News* employed Chinese health crisis frame and Chinese humanitarian crisis frame in constructing the initial COVID-19 outbreak. *CNA*, on the other hand, adopted frames that are more health topic-related by structuring its coverage with the Asian public health emergency frame and Singapore is under siege frame. While *BBC News* constantly categorized the outbreak as an Asian or Chinese crisis, distancing the U.K. from the narrative, *CNA* primarily structured it as a huge threat to the country and reported heavily on domestic precautionary measures. In terms of visual representation of the outbreak, a recurring theme on *BBC News* is Asians wearing facemasks. *CNA* employed more neutral images such as the virus itself or healthcare professionals engaging in their work. Since the public rely heavily on trusted news media to understand the crisis and form their opinions, the message disseminated by these national outlets are crucial and have consequences.

This study holds significance as we proposed practical advice for media practitioners and emerging infectious diseases (EIDs) communication advocates in formulating health messages in future outbreaks. It also suggests several directions for future research. First, researchers focused on framing effects can use the findings of this study in experimental studies to explore how different frames affect news consumers' perception and potential behaviors. Second, future research can examine more news outlets in European and Asian



contexts to better understand the influence of culture on news framing, which is a significant aspect of media studies.

This study also has a few limitations. Its generalizability is constrained as it examined only one European and Asian news outlet, which may not fully represent broader media trends within the cultural contexts. Second, the study only explored mainstream news outlets, including alternative media sources may provide a more rounded view of current media landscape. Third, without experimental designs or audience interviews and surveys, the study cannot definitively conclude that the differences observed in the frames could significantly influence individuals' perception or behaviors regarding COVID-19.

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### References

- Basch, C. H., Basch, C. E., Ruggles, K. V., & Hammond, R. (2015). Coverage of the Ebola Virus Disease Epidemic on YouTube. *Disaster Medicine and Public Health Preparedness*, 9(5), 531–535. <https://doi.org/10.1017/dmp.2015.77>
- Bock, M. A. (2020). Theorising visual framing: contingency, materiality and ideology. *Visual Studies*, 35(1), 1–12. <https://doi.org/10.1080/1472586X.2020.1715244>
- Borah, P. (2011). Conceptual Issues in Framing Theory: A Systematic Examination of a Decade's Literature. *Journal of Communication*, 61(2), 246–263. <https://doi.org/10.1111/j.1460-2466.2011.01539.x>
- Brennen, J. S., Simon, F. M., & Nielsen, R. K. (2021). Beyond (Mis)Representation: Visuals in COVID-19 Misinformation. *International Journal of Press/Politics*, 26(1), 277–299. <https://doi.org/10.1177/1940161220964780>
- Capurro, G., Jardine, C. G., Tustin, J., & Driedger, M. (2021). Communicating scientific uncertainty in a rapidly evolving situation: a framing analysis of Canadian coverage in early days of COVID-19. *BMC Public Health*, 21(1), 1–14. <https://doi.org/10.1186/s12889-021-12246-x>
- Cho, H., Li, W., Cannon, J., Lopez, R., & Song, C. (2021). Testing three explanations for stigmatization of people of Asian descent during COVID-19: maladaptive coping, biased media use, or racial prejudice? *Ethnicity and Health*, 26(1), 94–109. <https://doi.org/10.1080/13557858.2020.1830035>
- Chou, S., & Britt, R. K. (2024). Challenges in Media Attention toward COVID-19-Preventive Behaviors: Dual Roles of Threat and Perceived Capability for Information Systems and Health Care. *Behavioral Sciences*, 14(5). <https://doi.org/10.3390/bs14050377>
- Chung, A. Y., Jo, H., Lee, J. W., & Yang, F. (2021). COVID-19 and the Political Framing of China, Nationalism, and Borders in the U.S. and South Korean News Media. *Sociological Perspectives*, 64(5), 747–764. <https://doi.org/10.1177/07311214211005484>
- Chung, & Jones-Jang, S. M. (2022). Red Media, Blue Media, Trump Briefings, and COVID-19: Examining How Information Sources Predict Risk Preventive Behaviors via Threat and Efficacy. *Health Communication*, 37(14), 1707–1714. <https://doi.org/10.1080/10410236.2021.1914386>
- Cinelli, M., Quattrocioni, W., Galeazzi, A., Valensise, C. M., Brugnoti, E., Schmidt, A. L., ... Scala, A. (2020). The COVID-19 social media infodemic. *Scientific Reports*, 10(1), 1–10.

- <https://doi.org/10.1038/s41598-020-73510-5>
- Cushion, S. (2022). Are public service media distinctive from the market? Interpreting the political information environments of BBC and commercial news in the United Kingdom. *European Journal of Communication*, 37(1), 3–20. <https://doi.org/10.1177/02673231211012149>
- Dan, V. (2018). *Integrative Framing Analysis: Framing Health through Words and Visuals*. New York: Routledge. <https://doi.org/10.4324/9781315171456>
- Dhanani, L. Y., & Franz, B. (2021). Why public health framing matters: An experimental study of the effects of COVID-19 framing on prejudice and xenophobia in the United States. *Social Science and Medicine*, 269(December). <https://doi.org/10.1016/j.socscimed.2020.113572>
- Entman, R. M. (1993). Framing: Toward Clarification of a Fractured Paradigm. *Journal of Communication*, 43(4), 51–58.
- Fahmy, S., Bock, M. A., & Wanta, W. (2014). *Visual communication theory and research: A mass communication perspective*. New York: Plagrove Macmillan. <https://doi.org/10.1057/9781137362155>
- Fahmy, S., & Kim, D. (2008). Picturing the Iraq war: Constructing the image of war in the British and US press. *The International Communication Gazette*, 70(6), 443–462. <https://doi.org/10.1177/1748048508096142>
- Feng, M., Brewer, P. R., & Ley, B. L. (2012). Framing the Chinese baby formula scandal: A comparative analysis of US and Chinese news coverage. *Asian Journal of Communication*, 22(3), 253–269. <https://doi.org/10.1080/01292986.2012.662517>
- Goffman, E. (1974). *Frame Analysis: An Essay on the Organization of Experience*. Boston: In Northeastern University Press. <https://doi.org/10.1176/ajp.132.10.1093-a>
- Guenther, L., Gaertner, M., & Zeitz, J. (2020). Framing as a Concept for Health Communication: A Systematic Review. *Health Communication*, 36(7), 891–899. <https://doi.org/10.1080/10410236.2020.1723048>
- Hart, P. S., Chinn, S., & Soroka, S. (2020). Politicization and Polarization in COVID-19 News Coverage. *Science Communication*, 42(5), 679–697. <https://doi.org/10.1177/1075547020950735>
- Hubner, A. (2021). How did we get here? A framing and source analysis of early COVID-19 media coverage. *Communication Research Reports*, 38(2), 112–120. <https://doi.org/10.1080/08824096.2021.1894112>
- Humphries, B., Radice, M., & Lauzier, S. (2017). Comparing “insider” and “outsider” news coverage of the 2014 Ebola outbreak. *Canadian Journal of Public Health*, 108(4), e381–e387. <https://doi.org/10.17269/cjph.108.5904>
- Jafri, F., & Ariffin, A. (2021). Linguistic Agency Assignment in the Star Online Headlines on COVID-19. *3L: Language, Linguistics, Literature*, 27(4), 29–41. <https://doi.org/10.17576/3L-2021-2704-03>
- Jia, M., & Zhao, Y. (2023). Fear appeals in Chinese public signs of COVID-19 prevention in local communities. *Pragmatics and Society*, 14(2), 281–305. <https://doi.org/10.1075/ps.22009.jia>
- Kasmani, M. F. (2014). The nation-state factor in global news reporting : A study of the BBC World News and Al Jazeera English coverage. *The International Communication Gazette*, 76(7), 594–614. <https://doi.org/10.1177/1748048514547835>
- Knüpfer, C. B., & Entman, R. M. (2018). Framing conflicts in digital and transnational media environments. *Media, War and Conflict*, 11(4), 476–488.

- <https://doi.org/10.1177/1750635218796381>
- Kress, G., & Leeuwen, V. (2021). *Reading Images: The Grammar of Visual Design* (3rd edition). New York: Routledge.
- Liu, B. F., & Kim, S. (2011). How organizations framed the 2009 H1N1 pandemic via social and traditional media: Implications for U.S. health communicators. *Public Relations Review*, 37(3), 233–244. <https://doi.org/10.1016/j.pubrev.2011.03.005>
- Lowrey, W., Evans, W., Gower, K. K., Robinson, J. A., Ginter, P. M., McCormick, L. C., & Abdolrasulnia, M. (2007). Effective media communication of disasters: Pressing problems and recommendations. *BMC Public Health*, 7, 1–8. <https://doi.org/10.1186/1471-2458-7-97>
- Luisi, M. L. R., Barker, J., & Geana, M. (2018). American Ebola Story: frames in U.S. National Newspapers. *Atlantic Journal of Communication*, 26(5), 267–277. <https://doi.org/10.1080/15456870.2018.1517764>
- Lyu, Z., & Takikawa, H. (2022). Media framing and expression of anti-China sentiment in COVID-19-related news discourse: An analysis using deep learning methods. *Heliyon*, 8(8), e10419. <https://doi.org/10.1016/j.heliyon.2022.e10419>
- Maloney, E. K., White, A. J., Samuel, L., Boehm, M., & Bleakley, A. (2023). COVID-19 coverage from six network and cable news sources in the United States: Representation of misinformation, correction, and portrayals of severity. *Public Understanding of Science*, 33(1), 58–72. <https://doi.org/10.1177/09636625231179588>
- Matthes, J. (2009). What's in a frame? A content analysis of media framing studies in the world's leading communication journals, 1990-2005. *Journalism and Mass Communication Quarterly*, 86(2), 349–367. <https://doi.org/10.1177/107769900908600206>
- McCauley, M., Minsky, S., & Viswanath, K. (2013). The H1N1 pandemic: Media frames, stigmatization and coping. *BMC Public Health*, 13(1). <https://doi.org/10.1186/1471-2458-13-1116>
- Mello, S., Glowacki, E., Fuentes, I., & Seabolt, J. (2023). Communicating COVID-19 Risk on Instagram: A Content Analysis of Official Public Health Messaging During the First Year of the Pandemic. *Journal of Health Communication*, 28(1), 38–52. <https://doi.org/10.1080/10810730.2023.2175278>
- Mevorach, T., Cohen, J., & Apter, A. (2021). Keep calm and stay safe: The relationship between anxiety and other psychological factors, media exposure and compliance with covid-19 regulations. *International Journal of Environmental Research and Public Health*, 18(6), 1–13. <https://doi.org/10.3390/ijerph18062852>
- Nagpal, S. J. S., Karimianpour, A., Mukhija, D., Mohan, D., & Brateanu, A. (2015). YouTube videos as a source of medical information during the Ebola hemorrhagic fever epidemic. *SpringerPlus*, 4(1), 1–5. <https://doi.org/10.1186/s40064-015-1251-9>
- Nazione, S., Perrault, E., & Pace, K. (2021). Impact of Information Exposure on Perceived Risk, Efficacy, and Preventative Behaviors at the Beginning of the COVID-19 Pandemic in the United States. *Health Communication*, 36(1), 23–31. <https://doi.org/10.1080/10410236.2020.1847446>
- Ng, Y. M. M. (2023). A Cross-National Study of Fear Appeal Messages in YouTube Trending Videos About COVID-19. *American Behavioral Scientist*. <https://doi.org/10.1177/00027642231155363>
- Pandey, A., Patni, N., Singh, M., Sood, A., & Singh, G. (2010). YouTube As a Source of Information on the H1N1 Influenza Pandemic. *American Journal of Preventive Medicine*,

- 38(3), 1–4. <https://doi.org/10.1016/j.amepre.2009.11.007>
- Pieri, E. (2019). Media Framing and the Threat of Global Pandemics: The Ebola Crisis in UK Media and Policy Response. *Sociological Research Online*, 24(1), 73–92. <https://doi.org/10.1177/1360780418811966>
- Rohela, P., Bhan, A., Ravindranath, D., Bose, D. L., & Pathare, S. (2020). Must there be a “war” against coronavirus? *Indian Journal of Medical Ethics*, V(3), 222–226. <https://doi.org/10.20529/IJME.2020.070>
- Sastry, S., & Lovari, A. (2017). Communicating the Ontological Narrative of Ebola: An Emerging Disease in the Time of “Epidemic 2.0.” *Health Communication*, 32(3), 329–338. <https://doi.org/10.1080/10410236.2016.1138380>
- Saxon, B., Bass, S. B., Wright, T., & Panick, J. (2018). Ebola and the rhetoric of US newspapers: assessing quality risk communication in public health emergencies. *Journal of Risk Research*, Vol. 22, pp. 1309–1322. <https://doi.org/10.1080/13669877.2018.1473465>
- Scheufele, D. A., & Tewksbury, D. (2006). Framing, agenda setting, and priming: The evolution of three media Effects models. *Journal of Communication*, 57(1), 9–20. <https://doi.org/10.1111/j.0021-9916.2007.00326.x>
- Schneider, C. R., Dryhurst, S., Kerr, J., Freeman, A. L. J., Recchia, G., Spiegelhalter, D., & van der Linden, S. (2021). COVID-19 risk perception: a longitudinal analysis of its predictors and associations with health protective behaviours in the United Kingdom. *Journal of Risk Research*, 24(3–4), 294–313. <https://doi.org/10.1080/13669877.2021.1890637>
- Şencan, İ., & Kuzı, S. (2020). Global threat of COVID 19 and evacuation of the citizens of different countries. *Turkish Journal of Medical Sciences*, 50(SI-1), 534–543. <https://doi.org/10.3906/sag-2004-21>
- Stolow, J. A., Moses, L. M., Lederer, A. M., & Carter, R. (2020). How Fear Appeal Approaches in COVID-19 Health Communication May Be Harming the Global Community. *Health Education and Behavior*, 47(4), 531–535. <https://doi.org/10.1177/1090198120935073>
- Sun, W. (2021). The virus of fear and anxiety: China, COVID-19, and the Australian media. *Global Media and China*, 6(1), 24–39. <https://doi.org/10.1177/2059436421988977>
- Teo, P., Yeoh, B. S. A., & Ong, S. N. (2004). SARS in Singapore: Surveillance strategies in a globalising city. *Health Policy*, 72(3), 279–291. <https://doi.org/10.1016/j.healthpol.2004.11.004>
- Wallace, R., Lawlor, A., & Tolley, E. (2021). Out of an abundance of caution: Covid-19 and health risk frames in canadian news media. *Canadian Journal of Political Science*, 54(2), 449–462. <https://doi.org/10.1017/S0008423921000214>
- Washer, P. (2004). Representations of SARS in the British newspapers. *Social Science and Medicine*, 59(12), 2561–2571. <https://doi.org/10.1016/j.socscimed.2004.03.038>
- Wicke, P., & Bolognesi, M. M. (2020). Framing COVID-19: How we conceptualize and discuss the pandemic on Twitter. *PLoS ONE*, 15(9 October), 1–24. <https://doi.org/10.1371/journal.pone.0240010>
- Wiedicke, A., Reifegerste, D., Temmann, L. J., & Scherr, S. (2022). Verbal and Visual Framing of Responsibility for Type 1 Diabetes by Patient Influencers on Instagram. *Social Media and Society*, 8(4). <https://doi.org/10.1177/20563051221136114>
- Witte, K., & Allen, M. (2000). A meta-analysis of fear appeals: Implications for effective public health campaigns. *Health Education and Behavior*, 27(5), 591–615. <https://doi.org/10.1177/109019810002700506>
- Zhao, S., & Wu, X. (2021). From Information Exposure to Protective Behaviors: Investigating the Underlying Mechanism in COVID-19 Outbreak Using Social Amplification Theory and

Extended Parallel Process Model. *Frontiers in Psychology*, 12(May).  
<https://doi.org/10.3389/fpsyg.2021.631116>

Zweig, S. A., Zapf, A. J., Beyrer, C., Guha-Sapir, D., & Haar, R. J. (2021). Ensuring rights while protecting health: The importance of using a human rights approach in implementing public health responses to covid-19. *Health and Human Rights*, 23(2), 173–186.