

## News Distortion in Times of Crises: Covid-19 Case in the Arab Media

MOSTAFA SHEHATA\*<sup>1</sup>

NOHA ADEL

Menoufia University, Egypt

This article investigates news distortion within the Arab media ecosystem, as manifested on Arab media Facebook pages and perceived by Arab journalists during the COVID-19 pandemic. A textual analysis was conducted on 6 news Facebook pages affiliated with major local media channels in 6 Arab countries: Egypt, Saudi Arabia, the United Arab Emirates, Kuwait, Lebanon, and Tunisia. In addition, a survey was administered to 116 Arab journalists residing in these countries. The findings revealed five main distortion categories in pandemic reporting: (1) overestimating the official response, (2) underestimating the public response, (3) diverting readers' attention, (4) concealing information about the outbreak, and (5) posting unverified information. Moreover, the findings indicate that news distortion in Arab media during the pandemic is often influenced by institutional, rather than individual, pressures, including those from media organizations, government institutions, and societal norms.

*Keywords: news distortion, Arab media system, Arab journalists, social media, COVID-19*

In late 2019, COVID-19 emerged in China and rapidly evolved into a global pandemic. The initial case identified in Wuhan city led to 41 infections and one fatality (Riou & Althaus, 2020, p. 1). In January 2020, Chinese President Xi Jinping acknowledged the significant threat posed by the virus. By January 21, six deaths were recorded in China, prompting the country to notify the World Health Organization (WHO) about the pandemic's potential (Goswami et al., 2020, p. 269). Approximately two months later, on March 11, the WHO declared COVID-19 a global pandemic, with reported cases reaching 118,000 across 114 countries (World Health Organization, 2020).

Amid the COVID-19 crisis, the media, particularly social networking sites (SNS), have become a primary source of pandemic information. SNS platforms play a crucial role in the unrestricted dissemination of news, especially in countries imposing media blackouts. However, it is important to note that SNS can

---

Mostafa Shehata: [mostafa.shehata@media.menoufia.edu.eg](mailto:mostafa.shehata@media.menoufia.edu.eg)

Noha Adel: [noha.adel@media.menoufia.edu.eg](mailto:noha.adel@media.menoufia.edu.eg)

Date submitted: 2023-07-20

<sup>1</sup> The authors express their gratitude to Professor Ingrid Volkmer (University of Melbourne) for her unwavering support through the Risk Journalism Hub network, and extend their appreciation to the Arab scholars associated with the network for their invaluable insights on Arab media channels.

Copyright © 2024 (Mostafa Shehata and Noha Adel). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at <http://ijoc.org>.

also facilitate content distortion, which can be particularly harmful during health crises that generate fear and anxiety (Cosentino, 2020, p. 2).

Indeed, content distortion is prevalent in countries with limited press freedom and political stability. Furthermore, the very nature of a crisis tends to generate competing narratives, information, and disinformation, leading to considerable online confusion. For instance, SNS (including official pages) have been flooded with contradictory and distorted news about the symptoms, cases, deaths, and treatment of COVID-19. Such contradictions would significantly erode individuals' trust in digital news, a phenomenon that tends to hinder the dissemination of accurate information.

According to Okonji (2020), news distortion refers to the "deliberate omission of certain facts in a news story" (p. 772). This deliberate action can be attributed to journalists invoking their own ideology or interests (Baum & Groeling, 2008) or succumbing to the pressures they face (Rugh, 2004, pp. 16–17). For instance, *the Federal Communications Commission* has a distortion policy that depends on two conditions: the intention to "slant or mislead" and the significance of the event rather than a minor aspect of a news report (Timmer, 2019, p. 8).

However, news distortion can also be unintentional when it stems from a lack of information provided by journalists or arises from their unconscious biases. Horvath-Neimeyer (1992) identified three sources of news distortion: individual editors (e.g., placement of news items), environmental factors (e.g., culture, community, institutional policies, deadlines, and newshole), and reporters (e.g., information selection and presentation; p. 3).

In this article, we refer to news distortion as biased event coverage that manipulates reality. This may involve framing the information in a manner that leads to a carefully crafted narrative. Our focus is to examine the major forms of COVID-19 news distortion on Arab media Facebook pages. Additionally, we investigate the challenges experienced by Arab journalists that could have contributed to news distortion during the pandemic. By examining both the content itself and the journalists involved, we aim to gain a deeper understanding of the relationship between COVID-19 news and the contextual factors that influence its production.

### **News Distortion: Exploring Contextual Factors**

#### ***Perspectives on News Distortion: Traditional vs. New Media***

As a concept, news distortion has been defined in various ways in the literature, encompassing "recommendation filters or perspectives" (Tsui, 2010, p. 208), "inaccuracy, polarization and difference" (Jamieson & Cappella, 2008, p. 213), "translating actual occurrence into framed presentation" (Arntson & Smith, 1978, p. 376), partial information accuracy (Horvath-Neimeyer, 1992, p. 2), and "omission of certain facts" (Okonji, 2020, p. 772). The concept is often used to describe the bias and manipulation of events to convey a desired meaning to the audience. This can subtly influence news, guiding it toward a particular direction at the expense of other perspectives.

Significantly, news distortion has primarily been studied in traditional media literature, emphasizing the manipulation of news direction rather than changing the entire reality. For example, Horvath-Neimeyer (1992) demonstrated that reporters' stereotypes can influence the selection and interpretation of news due to cognitive biases. Additionally, Jamieson and Cappella (2008) emphasized that political bias can distort news reporting. Wahl-Jorgensen and Hanitzsch (2009), as well as Newman, Fletcher, Kalogeropoulos, Levy, and Nielsen (2019), showed that sensationalism contributes to news distortion. Rugh (2004) stressed that concentrated media ownership can restrict perspectives presented in news reporting, potentially leading to biased coverage. While studies examining traditional media have explored the reasons and conditions behind news distortion, the literature on new media has focused on the manifestations of distortion, particularly on social media platforms. This has highlighted distinctive forms of distortion linked to these outlets, including prioritizing official sources, lacking contextualization, commercial exploitation of journalism (Hong, 2017), amplifying incomplete study aspects, misinterpreting findings, emphasizing unusual claims (Groshek & Bronda, 2016), and retelling news from person to person (Melumad, Meyer, & Kim, 2021).

Hence, news distortion, though receiving less attention, has been incorporated into the new media literature, evolving from earlier studies that focused on bias in traditional media. Indeed, the rise of social media has introduced additional terms such as fake news, misinformation, and disinformation, which have garnered significant scholarly attention. These newer terms describe even more pronounced interference, potentially culminating in a significant transformation of the entire news story into fabricated content.

The consequences of news distortion have also been examined in literature, focusing on its impacts on individuals, society, and government. Jamieson and Cappella (2008) demonstrated how political news distortion can erode the public's perception of political issues. In a more recent work, Jadir and Maazouz (2022) highlighted the substantial impact of news distortion on social media, affecting economic, social, and political spheres. Furthermore, Groshek and Bronda (2016) discussed how social media distorts public understanding of scientific subjects and undermines support for governmental initiatives.

### ***Distortion of Pandemic News Coverage***

A closer look at the meaning of news distortion in the COVID-19 literature shows that the term has been used by some scholars (e.g., Çelik, 2020; Tymbay, 2022; Xu, 2023) to denote bias and partial fallacies. This sets news distortion apart from other terms widely used in COVID-19 studies (e.g., Baines & Elliott, 2020; Nguyen & Catalan, 2020), such as misinformation and disinformation, which refer to instances of false and misleading information.

Amid the COVID-19 pandemic, some studies have explored the characteristics and manifestations of news distortion. For instance, Çelik (2020) revealed an ideological bias in how international media outlets portrayed COVID-19 news related to Turkey. Additionally, Tymbay (2022) identified two major types of distortion strategies observed in headlines across Western and Russian media outlets during the pandemic: structure manipulation and language manipulation. Xu (2023) revealed presentation bias in United States partisan media coverage of COVID-19, indicating that media may distort information despite not selectively choosing stories. The risks of news distortion during the pandemic have also been discussed in some studies. Harris (2022) found that distorted news on COVID-19 influenced citizens' adherence to lockdown rules,

which might hinder official responses. Sulistiadi, Slamet, and Harmani (2020) highlighted the enduring stigma resulting from news distortion in Indonesia, impacting the public's perception of COVID-19 and healthcare workers. Similarly, Tymbay (2022) emphasized the broader impact of news distortion in manipulating public perceptions of the pandemic.

Investigating COVID-19 news distortion will enable us to address a substantial gap in the literature, which has predominantly focused on misleading content rather than on the inherent bias in the information. Our understanding of news distortion builds on existing literature (e.g., Çelik, 2020; Groshek & Bronda, 2016; Horvath-Neimeyer, 1992; Tymbay, 2022), which covers bias, partial manipulation, or framing of news to influence the narrative. This places our exploration apart from research on misinformation and disinformation (e.g., Galhardi, Freire, Minayo, & Fagundes, 2020; Gottlieb & Dyer, 2020), which often addresses false, erroneous, malicious, and fake information.

### ***Distorted Narratives Across the Media Ecosystem***

News distortion is not a purely abstract matter; it is connected to the broader ecosystem of news production and carries significant implications for the audience. Reviewing research on news distortion reveals a clear emphasis on various conditions, reasons, or manifestations, all of which can be categorized under three essential components that shape a media system: individual, institutional, and governmental.

(1) Individual components encompass various aspects related to the behavior of individuals within the media ecosystem. These include reporters' stereotypes (Horvath-Neimeyer, 1992), sensationalism (Newman et al., 2019), the prioritization of official sources (Hong, 2017), the introduction of interpretations and opinions (Melumad, Meyer, & Kim, 2021), amplification of incomplete aspects (Groshek & Bronda, 2016), and selective citation (Tymbay, 2022).

(2) Institutional components refer to the structural and organizational aspects within media institutions that direct content production. These include the control system of media institutions (Arntson & Smith, 1978) and concentrated media ownership (Rugh, 2004), both of which can influence editorial decisions and the diversity of viewpoints presented to the public.

(3) Governmental components pertain to the influence of governmental entities within the media landscape. This influence manifests as political bias, where media may be pressured to align with the agendas of ruling parties (Jamieson & Cappella, 2008), or ideological bias, where media outlets reflect allegiance to a specific ideology (Çelik, 2020).

This categorization enhances our understanding of the multifaceted dimensions that contribute to news distortion, offering a robust framework for analysis. Building on the identified central components in news production, we aim to provide a nuanced understanding that goes beyond the prevalent discourse, offering insights into the complexities of the Arab news ecosystem during the COVID-19 pandemic.

### COVID-19 Situation in the Arab Region

Comparing COVID-19 situations in six Arab countries—Egypt, Kingdom of Saudi Arabia (KSA), United Arab Emirates (UAE), Kuwait, Lebanon, and Tunisia—reveals varied responses shaped by distinct political and economic contexts (see Table 1). Notably, while the KSA, UAE, and Kuwait enjoy relative stability, the other three countries face varying degrees of instability.

**Table 1. COVID-19 Situation in Egypt, KSA, UAE, Kuwait, Lebanon and Tunisia.**

Countries	1 <sup>st</sup> case (2020)	Cases	Deaths	Vaccination doses	Tests per 1.000
Egypt	February 14	401.308	22.179	61.224.838	No data
KSA	March 2	620.935	8.908	54.082.835	1.005.37
UAE	January 29	808.237	2.195	23.108.541	11.831.80
Kuwait	February 24	470.478	2.477	7.198.089	1.496.36
Lebanon	February 21	826.279	9.397	4.951.680	698.96
Tunisia	March 2	791.917	25.817	14.097.156	306.68
Total		3919.154	70.973	164.663.139	1005.64

*Note.* Data for the 1<sup>st</sup> case, cases, deaths and vaccination doses from (World Health Organization, 2022b), and tests per 1.000 (Ritchie et al., 2022).

Starting with Egypt, the first confirmed COVID-19 case emerged on February 14, 2020 (World Health Organization, 2022a). Prior claims regarding the virus's presence have fueled ongoing uncertainty about its extent in Egypt. The Guardian reported early that 97 foreigners who had visited Egypt before February were infected upon returning to their home countries (Michaelson, 2020). The limited testing in the country and the attribution of people's deaths to other diseases instead of COVID-19 have further contributed to this ambiguity.

In the case of KSA, the country had previously experienced an earlier version of the coronavirus called MERS-CoV in 2012. On March 2, 2020, KSA identified its first COVID-19 case and implemented various strategies to mitigate the pandemic, including quarantine measures, travel restrictions, social distancing, hospital preparations, and the cancellation of the Hajj season (AlFattani, AlMeharish, Nasim, AlQahtani, & AlMudraa, 2021, p. 12). The Saudi official response to COVID-19 has been recognized as effective by several scholars and journalists.

The UAE's response to COVID-19 is notable due to its 88% expatriate population and heavy reliance on tourism (Zaher, Ahamed, Ganesan, Warren, & Koshy, 2021, p. 6). As an international hub, the UAE has adopted relatively flexible measures compared with its neighboring countries. For instance, while KSA closed its borders to foreign workers, the UAE served as a transit point for those workers to reach KSA (Abdel Wahab, 2021). Additionally, the UAE has conducted a significant number of COVID tests, surpassing many regional and global counterparts (Ritchie et al., 2022).

Kuwait enforced stricter measures, such as closing universities, schools, and non-essential businesses, suspending work, implementing a border lockdown, and imposing a partial curfew (Alahmad et al., 2020, p. 4). As a result of these measures, along with the decline in oil demand, Kuwait has experienced

a fiscal deficit and a 4.8% contraction in its GDP (The World Bank, 2020). The expatriate population, comprising 70% of the total population, has been significantly affected by these prevention procedures, facing wage cuts, job losses, and even deportation (John, 2020).

Lebanon has faced significant challenges in its COVID-19 response, including political instability, the Beirut port explosion, and a banking crisis. The country reported its first case on February 21, 2020, and implemented a gradual response, as noted by Khoury, Azar, and Hitti (2020), which involved closing public transport, banning flights, and shutting down public services. Additionally, Lebanon has faced resource constraints, a lack of testing capabilities, and shortages in the healthcare system, further complicating its response to the virus.

Tunisia presents another example of a country undergoing political transition and grappling with resource limitations, impacting its pandemic response. The country reported its first COVID-19 case on March 2, 2020, and, in response, implemented travel restrictions but maintained essential transport routes open (Otay, 2020). The government also imposed a nationwide night curfew, prohibited gatherings in closed places, and enforced the closure of restaurants at night (Fair Wear, 2021). However, Tunisia faced its most significant challenge when the health system collapsed in July 2021.

### **Materials and Methods**

This article used a mixed-method approach, combining textual analysis of Arab news media content with a survey of Arab journalists. This allowed us to examine both media content reflecting institutional policy and individual journalists' pandemic experiences.

#### ***Textual Analysis***

Following Hawkins's (2017) framework, the textual analysis studied six prominent Facebook pages: Youm7 (n.d.), Akhbaar24 (n.d.), Alkhaleej (n.d.), Alqabas (n.d.), Alakhbar (n.d.), and NessmaTV (n.d.). These pages represent local news media institutions in the KSA, UAE, Kuwait, Egypt, Lebanon, and Tunisia. Criteria for selection included affiliation with regional media companies, local news coverage, focus on COVID-19, and significant Facebook following.

In addition, these news outlets, all privately owned, represent a diverse spectrum of political alignments across the Arab world. From the reformist and pro-government stance of Youm7 in Egypt to the state nationalist and state-backed position of Akhbaar24 in Saudi Arabia, both outlets reflect the unique political climate of their respective countries. Alkhaleej in the UAE espouses Arab nationalism and is also pro-government, while Alqabas in Kuwait takes a slightly liberal and independent stance. Alakhbar in Lebanon leans leftist and is supported by partisan factions, while NessmaTV in Tunisia adopts a modernist approach backed by partisan interests.

The Facebook posts analyzed contained headlines, images (or videos), and links to news articles on the outlets' websites. The study also ensured a proper understanding of the headlines by examining the corresponding news articles on the outlets' websites.

Posts were collected from the six pages over a two-year period, from January 2020 to December 2021. Data extraction involved using the search field of each Facebook page. Initially, various Arabic search terms related to the desired data were used, including virus, Corona, China, COVID, vaccine, prevention measures, pandemic, social isolation, and quarantine. However, for the analysis, only the terms "Corona" and "COVID" were chosen due to their ability to retrieve the largest and most relevant number of posts (see Table 2).

**Table 2. Characteristics of Facebook Pages and Number of Analyzed Posts.**

Page	Country	Alignment	Page likes	Analyzed posts (N = 1102)
Youm7 (n.d.)	Egypt	Pro-government reformist	20M	195
Akhbaar24 (n.d.)	KSA	State-backed nationalist	213K	141
Alkhaleej (n.d.)	UAE	Pro-government Arab nationalist	2.3M	200
Alqabas (n.d.)	Kuwait	Liberal and independent	274K	185
Alakhbar (n.d.)	Lebanon	Partisan-backed leftist	2.1M	192
NessmaTV (n.d.)	Tunisia	Partisan-backed modernist	6.7M	189

Each post was individually downloaded and recorded in an Excel sheet, including its complete metadata, such as date, post link, hyperlink to the media channel website, image, posted content, and reactions (number of comments, shares, likes, love, haha, care, wow, angry, and sad). Notes were also taken during the data collection process, capturing information about the content themes, aims, context, and accuracy.

Following the data preparation and post-collection, the textual analysis was conducted using NVivo (version 13). The analysis encompassed written, visual, and spoken content and involved the following steps to systematically analyze the data.

- 1) Familiarization: Understanding post content, context, tone, language, and themes.
- 2) Main theme identification: Coding posts to identify main themes and develop categories.
- 3) Key point identification: Analyzing posts for emphasized/neglected points, recurring topics, arguments, and gaps.
- 4) Meaning definition: Identifying news formulation techniques to uncover intended meaning, considering attitudes, emotions, and impact.
- 5) Contextual linking: Connecting text meaning to broader social, cultural, and political contexts.
- 6) Iterative analysis: Continuously refining the coding scheme, examining patterns within and across themes.
- 7) Data synthesis and interpretation: Summarizing findings, highlighting themes, providing interpretations, insights, contextual understanding, and including evidence from posts.

### **Survey**

A survey was conducted to examine journalists' approaches to covering pandemic news and the pressures they faced, which could potentially lead to news distortion. The survey was developed, revised,

and pre-tested by the authors of this article in collaboration with a research team of nine members living in different Arab countries.

Using the online platform Qualtrics, the survey was distributed to journalists, with a recruitment strategy that ensured diversity in terms of gender, years of experience, job title, media type, and employment status (see Table 3). Additionally, a snowball sampling method was employed to identify relevant respondents. A total of 116 responses were received and considered for analysis. The data were imported into SPSS software (version 28) for coding and analysis.

**Table 3. Respondents' Demographic Characteristics.**

<b>Variables</b>		<b>(N = 116)</b>	<b>%</b>
Gender	Female	39	33.6
	Male	77	66.4
Professional experience	0-1 year	2	1.7
	2-4	12	10.3
	5-9	25	21.6
	10+	77	66.4
Job Title	Editor	25	18.1
	Journalist/reporter	44	37.9
	Management	22	19.0
	Trainee	3	2.6
	Other	22	19.0
Employment status	Full-time	66	56.9
	Part-time	18	15.5
	Freelance	21	18.1
	Unemployed	4	3.4
	Other	7	6.0
Countries	Egypt	44	37.9
	Saudi Arabia	19	16.4
	UAE	14	12.1
	Kuwait	12	10.3
	Lebanon	11	9.5
	Tunisia	6	5.2
	More than one country	10	8.6

The survey aimed to explore the contextual factors influencing COVID-19 news production, particularly the involvement of three key actors—media organizations, government, and society—who may exert pressure on Arab journalists. To examine the interventions of these actors, seven survey indicators were used:



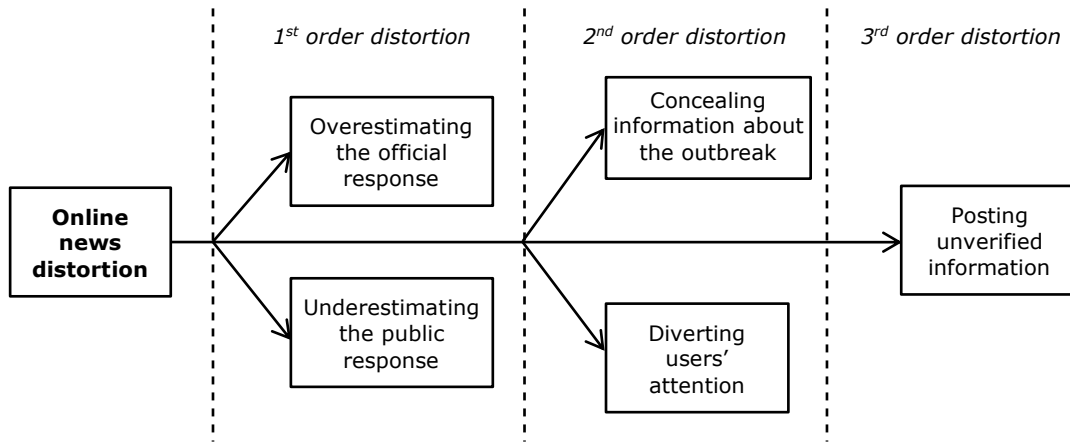
- A. Institutional pressures imposed by media companies:
  - 1. I have not been restricted by my organization from covering any aspect of the pandemic.
  - 2. My news organization alleviated budget and logistic pressures by providing support.
  - 3. I felt pressured about my news organization potentially facing financial difficulties.
- B. Political pressures imposed by the government:
  - 4. I have experienced government pressure to publish pandemic information.
  - 5. I have faced government pressure against the publication of pandemic information.
- C. Societal pressures enforced by society:
  - 6. I have faced cultural pressure while covering the pandemic.
  - 7. I have faced religious pressure while covering the pandemic.

Moreover, the survey assessed journalists' awareness of distortion using a five-item scale. Three items were used to assess journalists' understanding of distortion: "I have a good understanding of what distortion is," "My media organization has guidelines on how to identify distortion," and "I have received training on how to handle distortion." These items were rated on a six-point format: strongly agree = 5, agree = 4, neither agree nor disagree = 3, disagree = 2, strongly disagree = 1, and do not know = 0. The remaining two items (distortion is affecting how my fellow journalists and I cover the pandemic, and the organization for which I produce stories has been associated with producing distorted information) were rated on a six-point format: strongly agree = 1, agree = 2, neither agree nor disagree = 3, disagree = 4, strongly disagree = 5, do not know = 0. The total score on the scale ranged from 0 to 25 and was categorized into three levels: slight understanding of distortion (0–8), moderate (9–17), and high (18–25) understanding.

## **Findings**

### ***COVID-19 Categories of News Distortion***

Based on a thorough analysis of the data from Arab Facebook pages, five main categories of distortion were identified in the text (see Figure 1). These categories shed light on the approach of Arab media in covering COVID-19 news and reflect the complexities of news production during crises influenced by societal actors interfering in journalists' work.



**Figure 1. Forms of online news distortion in the Arab media.**

#### *Overestimating the Official Response to the Virus*

The analysis of the six Facebook pages reveals a clear focus on the official government response to the pandemic, with an overestimation of its importance. For instance, the Egyptian Youm7 (n.d.) page primarily highlighted government procedures to combat the virus without any criticism of these measures in any of its posts throughout 2020 and 2021.

Similarly, KSA Akhbaar24 (n.d.) and UAE Alkhaleej (n.d.) heavily emphasized government efforts in combating the virus, often exaggerating their successes. During summer 2020, amid global and regional virus peaks, both outlets highlighted their countries' supposed victories against the virus. Akhbaar24 (2020c) reported, "King Salman Hospital in Riyadh Bid Farewell to the Last Patient Infected with the Corona Virus," while Alkhaleej (2020b) stated in a video, "Ajman\_Police, the Medical District and the Emergency, Crisis and Disaster Center in Ajman celebrate the recovery and exit of the last worker infected with Coronavirus" (00:00:01). Additionally, Alkhaleej (2021c) claimed that, "the UAE is the First in the World in Dealing with Covid-19." Following Alkhaleej, the Tunisian NessmaTV (2021b) claimed the superiority of Tunisia in dealing with the crisis in a post titled "Tunisia is the First Arab Country in Managing the COVID-19 Crisis."

A similar pattern of overestimation was observed on the Kuwaiti Alqabas page, which adopted a specific approach to the crisis. It emphasized the number of recovered individuals while disregarding the figures related to infections and deaths. For example, Alqabas (2020d) once posted, "The Total Number of People Recovered Reached 57,330."

Moreover, although the six pages generally refrained from criticizing the health situation in the respective countries, there were a few exceptions worth mentioning. For example, Alqabas (2020b) warned of "A New Dangerous Juncture" in Kuwait. More critical was Alakhbar (2020d), which predicted "The Worst Scenario" for Corona in Lebanon during winter. Nevertheless, neither Alakhbar nor Alqabas held their

respective governments responsible for the crisis. In contrast, NessmaTV clearly criticized the Tunisian government's response to the virus on multiple occasions.

#### *Diverting Attention to the Losses of Foreign Countries*

Another method of distortion observed in the Arab news media is the emphasis on infections in foreign countries with the highest case numbers. This would be considered normal if these media channels also highlighted the outbreak in the countries they operate in, but they did not do so. They even neglected countries with lower infection rates, such as New Zealand and Hong Kong. This approach may seek to persuade people that the problem is global and more severe in advanced nations, including those in Europe and America.

Alkhaleej focused on comparing the response of the UAE to foreign countries facing the crisis. For example, Alkhaleej (2020a) shared a video in a post titled, "A Lebanese Woman Recovering from #Corona: Thank God for my Presence in the #UAE." Egypt's Youm7 also highlighted the situation in Western and Eastern countries severely affected by the pandemic, reporting on November 14, 2021, "Germany Reaches a Record Number of Corona Infections; 5 Million People have been Infected with the Virus." Following Youm7, the Kuwaiti Alqabas (2021c) used strong language to describe the crisis in Iran: "Corona Pandemic Causes a Tsunami of Death in Iran." Surprisingly, Alqabas (2020a) highlighted accusations of falsifying death numbers in other countries, quoting a parliament member as saying, "Is it Possible that Egypt does not have Corona?!"

Notably, the Lebanese news outlet Alakhbar frequently reported on the impact of the virus in foreign countries. Alakhbar (2020b) mentioned, "Corona Epidemic Crisis has Shown the Collapse of the Health System of Some Advanced Countries, such as France, Italy, Spain and Others." NessmaTV also emphasized the losses in foreign countries, particularly France, without denying or downplaying the severity of the crisis in Tunisia. Instead, NessmaTV (2020d) strongly criticized the increase in cases and deaths in Tunisia, stating, "Corona in Tunisia: A Fiercer Wave in the Coming Weeks, and Deaths are Expected to Rise."

#### *Underestimating the Response of the People*

In contrast to the overestimation of governments' responses to the virus, certain pages have downplayed the role of the people and even blamed them for the outbreak of the epidemic. While it would be understandable if these pages were focused on assessing shortcomings in the actions of official institutions, they instead chose to criticize the role of citizens, who are the weakest link in the system.

Egypt's Youm7 exemplified the tendency to attribute the outbreak's responsibility to the public while avoiding criticism of the government. For instance, Youm7 (2020b) shared a post stating, "The Minister of Health Warns of the Iranian Scenario: We will Suffer if Preventive Measures Continue to be Ignored." Similarly, Alakhbar (2020a) featured a video titled "Will Corona Infect Three Million People in Lebanon?" (00:00:03), which highlighted the people's responsibility in reducing the number of deaths.

Similarly, Kuwait's Alqabas focused on the rising number of infections, particularly among expatriates, which can be seen as placing blame on a specific group that may not have the privilege of staying at home during the pandemic. Alqabas (2021b) stated, "Sources: #Coronavirus Patients are in Hospitals, #Expatriates are the Majority." Likewise, NessmaTV (2020a) addressed the issue of irregular immigrants and their negative role during the crisis in a post titled "Corona: The Opening of a COVID-19 Center to Accommodate Irregular Migrants." However, overall, NessmaTV did not shift blame onto the Tunisian public, instead maintaining a focus on the government's actions.

Taking a middle stance, KSA's Akhbaar24 (2020a) shared a video featuring the Kingdom's Health Minister saying, "I Thank the Citizens and Expatriates for their Commitment and Adherence to Social Distancing, which Contributed to Confronting the Virus" (00:01:50). However, it is worth noting that this acknowledgment of the people's efforts by the health minister was mentioned alongside praise for the government.

#### *Concealing Information About the Epidemic Outbreak*

The findings reveal that certain Facebook pages overlooked the magnitude of the pandemic and the significant challenges it presented. For instance, despite Egypt facing issues such as a shortage of hospital beds, ventilators, oxygen supply, and instances of medical negligence, the Youm7 page did not address any of these problems.

Conversely, during the initial phase of the crisis, expatriates in Kuwait encountered financial difficulties, employment challenges, and the risk of deportation. However, the Alqabas (2020c) page disregarded these issues, except for sharing a video blaming "residence dealers" who assist foreigners in immigrating to Kuwait while avoiding criticism of the relevant institutions.

Within this category of news distortion, a particular approach was employed, which involved disregarding the consequences of the pandemic until they had subsided and then presenting this as a significant accomplishment. As an illustration, Akhbaar24 chose not to report on the economic losses suffered by KSA due to the pandemic, but later eagerly shared a video in a post titled "The Minister of Finance Announces the Recovery of the Economy of the Kingdom from the Effects of the Corona Pandemic" (Akhbaar24, 2021). Likewise, Alkhaleej (2021b) neglected to address the economic losses in the UAE but instead emphasized the first signs of growth following the pandemic in a post stating, "#Urgent, UAE Records the First Positive Cash Flow Since the Spread of Covid-19."

In contrast to other news outlets, NessmaTV extensively covered the crisis in Tunisia through multiple posts, providing detailed accounts of the challenging situation in various cities. NessmaTV (2021a) reported on the overwhelming number of fatalities, quoting the head of the COVID-19 unit at Charles Nicole Hospital, who revealed, "We are Currently Recording a Death every 25 Minutes."

### *Posting Unverified Information*

Arab media outlets have also encountered instances where unverified information has been shared. In what could be seen as a moment of oversight, Youm7 (2020a) mentioned that the Egyptian Minister of Health had reportedly obtained a document from China related to combating the coronavirus. Additionally, Youm7 published several news without proper verification. One such example was a video in a post titled "A Glimmer of Hope, New Surprises about the Egyptian #Corona Vaccine" (Youm7, 2020c), which confirmed the imminent development of an Egyptian vaccine. Likewise, NessmaTV (2020c) made a similar mistake when it reported unverified information about a local vaccine: "A Tunisian Vaccine against Corona will be Ready in November."

Akhbaar24 (2020b) shared a video of a Saudi doctor in a post titled "Gulf Countries will not Witness a Second Wave of Corona for this Reason." This opinion highlights the risk of physicians predicting prevention measures on social media that contradict recommended policies, as discussed by Gottlieb and Dyer (2020). In addition, Alkhaleej (2021a) engaged in ambiguous reporting about the treatment of the virus in the UAE by claiming, "Scorpion Venom Treats the Transformations of Corona."

One speculative hypothesis that emerged was the link between 5G technology and the pandemic, as posed by Alakhbar (2020c), which asked, "Is There a Hidden Relationship between Fifth Generation Technologies and Corona?" Regrettably, Alakhbar provided a vague analysis on its website without offering a clear answer to the question, which could be considered uninformed coverage.

Similarly, Alqabas (2021a) presented an exaggerated news headline stating, "Urgent Good News, a New Discovery from Scientists that will End the Corona Epidemic," which can be seen as unconfirmed reporting. Even health officials can contribute to the distortion of information sources. For example, NessmaTV (2020b) posted a quote from the Director of Health in Monastir, who stated, "Coronavirus is an Ordinary Disease, which is Less Severe than a Common Cold." This inaccurate statement about the virus's symptoms was not refuted on either the Facebook page or the TV channel website.

### ***The Role of Journalists in COVID-19 News Distortion***

Given the widespread impact of the pandemic across various aspects of society, it is not surprising that a majority of journalists (94.8%) have been actively involved in reporting on COVID-19. Only a small percentage (5.2%) have not produced any work related to the pandemic. Among those who have engaged in covering the virus, a significant portion (28.4%) have consistently produced stories, with an additional 25.9% reporting very often on COVID-19. Moreover, 32.8% of journalists have covered the topic sometimes, while only 7.8% have done so rarely.

Interestingly, the emergence of COVID-19 has also brought about a notable shift in news values, with the virus dominating media coverage for a prolonged period of at least two years. This shift in news priorities reflects the unprecedented and far-reaching impact of the pandemic on society, making it a focal point for journalists across the globe.

The extensive production of stories about COVID-19 by journalists provides valuable insight into their relationship with news distortion. The results showed that the majority of journalists (57.8%) possessed a moderate understanding of distortion, while 40% exhibited a good understanding. In contrast, only 1.7% demonstrated a slight understanding. These findings suggest that journalists can identify misleading content.

One significant indication of journalists' awareness is their greater reliance on primary sources of information in reporting on COVID-19 compared with secondary sources. Health experts ranked first with 16%, closely followed by the World Health Organization at 15.6%, government officials at 13.9%, and press releases at 12.2%. On the other hand, Arab journalists used other sources less frequently, including international media outlets (12%), scientific journals (10.1%), marginalized sources (8.8%), alternative sources (5.8%), and social media (5.5%).

The keenness of Arab journalists to rely on primary sources of information can be seen as a positive indicator, particularly during a crisis marked by fear, controversy, and uncertainty. This reflects their commitment to obtaining reliable and trustworthy information and contributes to providing accurate coverage amid challenging circumstances.

However, an important question arises: Why were many COVID-19 news distorted in Arab media channels, despite journalists being aware of distortion and striving to maintain reliability? To shed light on this issue, we investigated the interventions made by societal actors intertwined in the media system that might have influenced news production during the pandemic. In the following sections, we will provide answers to this question and explore how the news reporting process was impacted.

### ***Factors of COVID-19 News Distortion***

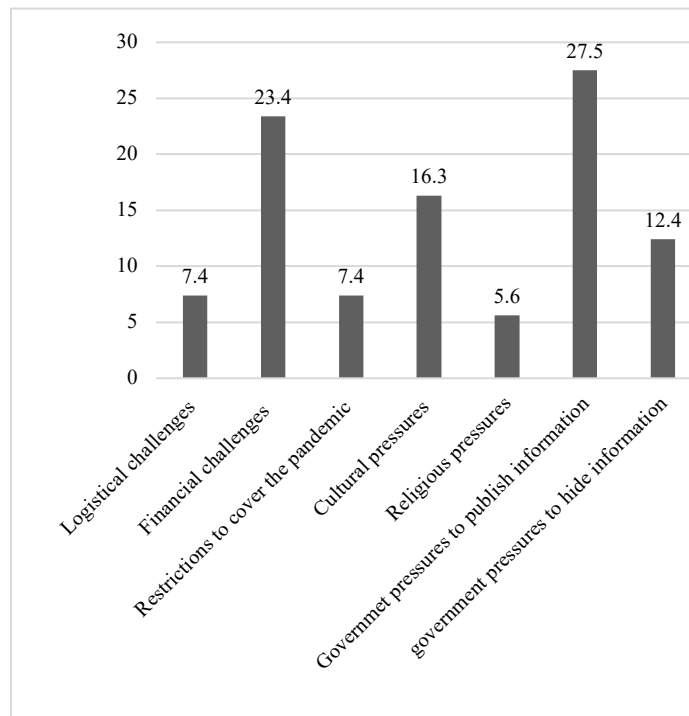
The COVID-19 pandemic posed unprecedented challenges for journalists, navigating through societal conditions like widespread infection, social isolation, quarantine, lockdowns, vaccinations, and prevention measures. In such crises, external interference in journalism, especially in regions like the Arab world, escalated, increasing the risk of news manipulation and distortion.

In this study, we examined and categorized three primary pressures that act as factors for news distortion during the COVID-19 pandemic. These factors, experienced by Arab journalists, encompass micro-level institutional challenges imposed by media organizations, meso-level governmental pressures enforced by government officials, and macro-level societal influences dictated by community social norms. Within each category, we identified specific elements that contribute to distortion, resulting in a total of seven distinct challenges.

Political pressures imposed by governments ranked first at 39.9%, involving journalists either being directed to publish specific information (27.5%) or instructed to conceal certain information (12.4%). This reflects the prevailing state of press freedom in the region, underscoring the need for caution when engaging with COVID-19 content published by Arab media, given the vulnerability of media outlets to official interventions.

In terms of “institutional pressures” originating from media organizations, they ranked second at 38.2%. These pressures encompassed the fear of financial constraints (23.4%) and the lack of logistical support for covering the pandemic (7.4%). Both of these institutional challenges pose significant obstacles to journalists’ job stability and can result in media organizations imposing restrictions on reporting the pandemic, which emerged as the third prominent challenge at 7.4%.

Another significant category is “societal pressures,” which ranked third at 23.7%. This category encompassed cultural pressures (16.3%) and religious pressures (5.6%). These pressures are closely linked to the prevailing values and beliefs within society, and they greatly influence the media’s reporting of pandemic news. For instance, challenges arose when addressing religious beliefs that view the pandemic as a divine test, as well as when dealing with individuals who perceive avoiding gatherings as disrespectful or offensive behavior (see Figure 2).



**Figure 2. Challenges that faced Arab journalists.**

### Discussion and Conclusion

This study contributes to the existing literature by providing empirical evidence of news distortion within the Arab media landscape during the COVID-19 pandemic. Additionally, it offers reflections on the significance of this distortion within the broader context of the Arab media system.

While previous studies have often employed a top-down perspective, emphasizing regulators' intervention in the media, our study adopts a bottom-up approach, prioritizing journalists' responses to these interventions and their reflections in the produced content. This research also diverges from prior literature, which primarily explores the intentionality behind news distortion (e.g., Okonji, 2020; Tymbay, 2022). Instead, it focuses on the methods and factors of distortion through a mixed-method approach, involving textual analysis of Arab Facebook news pages and a journalist survey.

The textual analysis uncovered five distinct forms of news distortion used during the pandemic: overestimating the official response, underestimating the public response, diverting attention to foreign countries' losses, concealing outbreak information, and spreading unverified information. The use of these distortion methods, whether intentional or unintentional, highlights how mainstream media can promote biased content.

Despite variations in alignment, the Arab media channels examined in this study relied on similar methods to distort information. However, three noteworthy observations arise in terms of the prevalence of these distortion methods. First, Egypt's Youm7 topped the list, hindering accurate COVID-19 reporting. Second, Tunisia's NessmaTV displayed the least distortion, reflecting its post-revolution media freedom. Lastly, the remaining channels, including KSA's Akhbaar24, UAE's Alkhaleej, Kuwait's Alqabas, and Lebanon's Alakhbar, exhibited a relatively consistent approach with varying degrees of distortion in their COVID-19 coverage.

The prevalence of similar distortion methods in reporting the pandemic underscores the interconnectedness between media institutions in the Arab region and governmental responses to the pandemic. This explanation aligns with Khamis (2020), who observed that Arab regimes have actively sought to "frame the narrative around the pandemic according to their own priorities, interests, and agendas, while vehemently resisting any counter narratives" (para. 21).

The forms of distortion not only shed light on the media landscape during the pandemic but also underscore the broader media ecosystem prevalent in the Arab region. As Richter and Kozman (2021) described, this ecosystem is characterized by the overwhelming influence of states and their control over information dissemination (p. xxix). Therefore, the existence of media restrictions during the pandemic is no exception; rather, it is part of a broader pattern within the media system that extends beyond crises.

Although SNS news pages were found to employ distortion methods during the pandemic, the Arab journalists themselves, as individuals, demonstrated a strong disdain for news distortion. This rejection of news distortion was evidenced by the journalists' reliance on primary sources to obtain information on COVID-19 and their perceived awareness of news distortion. While several studies have outlined the responsibility of individual journalists for distortion through gathering and selecting information (e.g., Groshek & Bronda, 2016; Horvath-Neimeyer, 1992; Newman et al., 2019; Tymbay, 2022), we found that the most significant distortion in times of crisis does not originate from the reporters themselves but rather from the media system, effectively reducing journalists to mere conduits for distortion rather than its instigators. This phenomenon might be more prevalent in non-democratic media systems, indicating a need for comparative research on news distortion between journalists in free and non-free countries.



This discrepancy between the practices of media institutions and the beliefs of individual journalists suggests that distortion is not merely an individual choice; rather, it is likely an institutional orientation, particularly during crises. This notion is supported by survey findings that identified three major challenges faced by Arab journalists that impacted news production during the pandemic.

These challenges, indicative of the practices and complexities within the Arab region's media system, include political pressures exerted by governments at the meso-level. This highlights the dominant influence of the governmental component in shaping both news production and biases within the region's media system (Khalifa, 2021, p. 27). These findings are consistent with AlAashry's (2022) study, which uncovered official pressures on Arab journalists during their coverage of COVID-19 and echoed the earlier assertion by Jamieson and Cappella (2008) about the significance of political pressures in distorting news content in media channels.

The second challenge involves institutional pressures imposed by media organizations at the micro-level, which restricted the free coverage of the pandemic news. One motivating factor behind institutional restrictions is the leadership of media institutions, which are often loyal or pressured to align with the government. The financial crisis experienced by media institutions during the pandemic heightened the impact of institutional pressures on journalists. In addition, the concentration of media ownership, particularly by the government or pro-government actors—especially evident in the Egyptian Youm7, Saudi Akhbaar24, Emirati Alkhaleej, and Kuwaiti Alqabas—plays a pivotal role in driving institutional pressures on journalists. Indeed, the ownership concentration exhibits political bias, as outlined by Rugh (2004), through favoring the government and advocating for public support (p. 51). The exception lies in partisan-backed outlets (Tunisian NessmaTV and Lebanese Alakhbar), which have adopted a critical tone in their coverage of the pandemic.

The third challenge encompasses societal pressures originating from the community at the macro-level. Social and religious values serve as pivotal components in shaping representation in media discourse (Richter & Kozman, 2021, p. xxiv). While journalists in other regions may not typically encounter religious and cultural challenges when covering the pandemic, it is a common occurrence in the Arab context. This challenge stemming from journalists' experiences and their perceptions of the society they live in, has significantly influenced the coverage of the pandemic. The reliance of media channels on clerics allowed the dissemination of religious rulings related to COVID-19. The prioritization of religious beliefs and norms at times supersedes scientific facts in addressing the virus, leading to what Rugh (2004) describes as a "cultural bias," which remains a prevalent trend in Arab news presentation (p. 16). Future research could further investigate how media institutions navigate these pressures and their implications for the accuracy of pandemic reporting.

To conclude, this article argues that news distortions during the COVID-19 crisis are closely linked to the pressures experienced by Arab journalists, reflecting the broader media ecosystem in the region, characterized by a lack of trust and credibility. The findings suggest that the challenges faced by journalists, including political pressures, institutional constraints, and societal influences, contribute to the occurrence of news distortion.

### Research Limitations

This study is limited to the data collection period from January 2020 to December 2021, which may not fully capture news distortion beyond that timeframe. In addition, the use of non-probability snowball sampling may restrict the generalizability of the findings, despite efforts to recruit diverse respondents. Furthermore, the reliance on self-reported survey data may introduce response bias, which we mitigated by prioritizing specific actions over beliefs and attitudes. Given the constraints of press freedom in the Arab region, despite efforts to promote honesty, there is no guarantee that all participants accurately reported the pressures they faced while covering COVID-19.

### References

- Abdel Wahab, E. (2021, September 9). Lileamalat almisriat alraaghibat fi alsafar 'ila Alsaoudiat: Kayf yumkinuk dukhul Almamlakat eabr Al'imat? [For Egyptian workers wishing to travel to Saudi Arabia: How can you enter the Kingdom through the Emirates?]. *Almasry Alyoum*. Retrieved from <https://www.almasryalyoum.com/news/details/2413810>
- Akhbaar24. (n.d.). *Home* [Facebook page]. Retrieved February 8, 2022, from <https://www.facebook.com/akhbaar24>
- Akhbaar24. (2020a, May 25). *Speech by the #Minister\_of\_Health on the latest developments in combating "#Coronavirus"* [Video file]. Facebook. Retrieved from <https://www.facebook.com/watch/?v=257908568755445>
- Akhbaar24. (2020b, June 8). *#Gulf\_countries will not witness a second wave of #Corona for this reason* [Status update]. Facebook. Retrieved from <https://www.facebook.com/watch/?v=292664728787915>
- Akhbaar24. (2020c, August 26). *King Salman Hospital in #Riyadh bid farewell to the last patient infected with the #Corona virus* (Video) [Status update]. Facebook. Retrieved from <https://www.facebook.com/akhbaar24/posts/3562839913791918>
- Akhbaar24. (2021, July 29). *The Minister of Finance announces the recovery of the economy of the Kingdom from the effects of the Corona pandemic* [Video file]. Facebook. Retrieved from <https://www.facebook.com/watch/?v=1217059702142868>
- AlAashry, M. S. (2022). A critical analysis of journalists' freedom of expression and access to information while reporting on COVID-19 issues: A case of selected Arab countries. *Journal of Information, Communication and Ethics in Society*, 20(2), 193–212. doi:10.1108/JICES-06-2021-0066

- Alahmad, B., Kurdi, H., Colonna, K., Gasana, J., Agnew, J., & Fox, M. A. (2020). COVID-19 stressors on migrant workers in Kuwait: Cumulative risk considerations. *BMJ Global Health*, 5(7), e002995. doi:10.1136/bmjgh-2020-002995
- Alakhbar. (n.d.). *Home* [Facebook page]. Retrieved February 21, 2022, from <https://www.facebook.com/AlakhbarNews>
- Alakhbar. (2020a, March 23). *Study: Coronavirus scenarios. Will Corona infect three million people in Lebanon?* [Video file]. Facebook. Retrieved from <https://www.facebook.com/AlakhbarNews/videos/488146398732541/>
- Alakhbar. (2020b, April 3). *Corona epidemic crisis has shown the collapse of the health system of some advanced countries, such as France, Italy, Spain* [Status update]. Facebook. Retrieved from <https://www.facebook.com/AlakhbarNews/posts/2896133143834386>
- Alakhbar. (2020c, April 16). *Is there a hidden relationship between fifth generation technologies and Corona?* [Status update]. Facebook. Retrieved from <https://www.facebook.com/AlakhbarNews/posts/2924623290985371>
- Alakhbar. (2020d, August 29). *Corona in Lebanon: The worst-case scenario is coming in winter* [Status update]. Facebook. Retrieved from <https://www.facebook.com/AlakhbarNews/posts/3306146699499693>
- AlFattani, A., AlMeharish, A., Nasim, M., AlQahtani, K., & AlMudraa, S. (2021). Ten public health strategies to control the Covid-19 pandemic, the Saudi experience. *IJID Regions*, 1, 12–19. doi:10.1016/j.ijregi.2021.09.003
- Alkhaleej. (n.d.). *Home* [Facebook page]. Retrieved March 26, 2022, from <https://www.facebook.com/alkhaleej>
- Alkhaleej. (2020a, May 26). *A Lebanese woman recovering from #Corona: Thank God for my presence in the #UAE* [Status update]. Facebook. Retrieved from <https://www.facebook.com/watch/?v=248929719715563>
- Alkhaleej. (2020b, August 14). *#Ajman\_Police, the Medical District and the Emergency, Crisis and Disaster Center in #Ajman celebrate the recovery and exit of the last worker infected with #Corona from the Ajman Isolation Building* [Video file]. Facebook. Retrieved from <https://www.facebook.com/watch/?v=953689558391345>
- Alkhaleej. (2021a, October 27). *Scorpion venom treats the transformations of Corona* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alkhaleej/posts/2057177557790667>

- Alkhaleej. (2021b, November 7). *#Urgent, UAE records the first positive cash flow since the spread of Covid-19* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alkhaleej/posts/2066487646859658>
- Alkhaleej. (2021c, November 30). *#The\_UAE is the first in the world in dealing with Covid-19* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alkhaleej/posts/2084410235067399>
- Alqabas. (n.d.). *Home* [Facebook page]. Retrieved February 5, 2022, from <https://www.facebook.com/alqabasnewspaper/>
- Alqabas. (2020a, March 2). *Al-Hashem to Al-Qabas: Is it possible that Egypt does not have Corona?!* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alqabasnewspaper/posts/2889341534421527>
- Alqabas. (2020b, March 30). *Corona Kuwait. At a new dangerous juncture!* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alqabasnewspaper/posts/2951816191507394>
- Alqabas. (2020c, June 26). *#Human\_trade, when men are defeated! Alqabas hears the voice of laborers in the face of injustice and residence dealers* [Video file]. Facebook. Retrieved from <https://www.facebook.com/watch/?v=2357506077876890>
- Alqabas. (2020d, June 30). *The total number of people recovered reached 57,330* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alqabasnewspaper/posts/3261919900497020>
- Alqabas. (2021a, February 3). *Urgent good news: A new discovery from scientists that will end the Corona epidemic* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alqabasnewspaper/posts/3790256997663305>
- Alqabas. (2021b, April 12). *Sources: #Coronavirus patients are in hospitals. #Expatriates are the majority* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alqabasnewspaper/posts/3985783558110647>
- Alqabas. (2021c, August 13). *#Corona pandemic causes a tsunami of death in #Iran* [Status update]. Facebook. Retrieved from <https://www.facebook.com/alqabasnewspaper/posts/4341326319223034>
- Arntson, P. H., & Smith, C. R. (1978). News distortion as a function of organizational communication. *Communications Monographs*, 45(4), 371–381.
- Baines, D., & Elliott, R. J. (2020, April 21). *Defining misinformation, disinformation and malinformation: An urgent need for clarity during the COVID-19 infodemic* (Working Paper No. 20–06). University of Birmingham. Retrieved from <https://ideas.repec.org/p/bir/birmec/20-06.html>

- Baum, M. A., & Groeling, T. (2008). New media and the polarization of American political discourse. *Political Communication, 25*(4), 345–365. doi:10.1080/10584600802426965
- Çelik, F. (2020). Ideological distortion of news: COVID-19 news in international media about Turkey. In Ö. Aydınlioğlu (Ed.), *Ideology in communication studies* (pp. 275–302). Klaipeda, Lithuania: SRA Academic Publishing.
- Cosentino, G. (2020). Social media and the post-truth world order: The global dynamics of disinformation. *Church, Communication and Culture, 6*(2), 408–411. doi:10.1080/23753234.2021.1945936
- Fair Wear. (2021). *Covid-19 impact and responses: Tunisia*. Amsterdam, The Netherlands: Fair Wear. Retrieved from <https://www.fairwear.org/country-specific-guidance/covid19-tunisia/>
- Galhardi, C. P., Freire, N. P., Minayo, M. C. D. S., & Fagundes, M. C. M. (2020). Fact or fake? An analysis of disinformation regarding the Covid-19 pandemic in Brazil. *Ciência & Saúde Coletiva, 25*(suppl 2), 4201–4210. doi:10.1590/1413-812320202510.2.28922020
- Goswami, M., Sharma, S., Kumar, G., Gogia, M., Grewal, M., Garg, A., . . . Bidhan, R. (2020). Dealing with "Coronavirus pandemic": A dental outlook. *International Journal of Clinical Pediatric Dentistry, 13*(3), 269–278. doi:10.5005/jp-journals-10005-1757
- Gottlieb, M., & Dyer, S. (2020). Information and disinformation: Social media in the COVID-19 Crisis. *Academic Emergency Medicine, 27*(7), 640–641. doi:10.1111/acem.14036
- Groshek, J., & Bronda, S. (2016, June 30). *How social media can distort and misinform when communicating science*. The Conversation. Retrieved from <https://theconversation.com/how-social-media-can-distort-and-misinform-when-communicating-science-59044>
- Harris, L. C. (2022). Breaking lockdown during lockdown: A neutralization theory evaluation of misbehavior during the Covid 19 pandemic. *Deviant Behavior, 43*(7), 765–779. doi:10.1080/01639625.2020.1863756
- Hawkins, J. M. (2017). Textual analysis. In M. Allen (Ed.), *The SAGE encyclopedia of communication research methods* (pp. 1753–1756). Thousand Oaks, CA: Sage publications.
- Hong, S. (2017). Like, comment, and share: Distortion of information on Facebook. *Global Honors Theses, 47*. Retrieved from [https://digitalcommons.tacoma.uw.edu/gh\\_theses/47](https://digitalcommons.tacoma.uw.edu/gh_theses/47)
- Horvath-Neimeyer, P. (1992). *What we believe and what we ask: Message contradictions and news gathering*. (Doctoral dissertation). University of Florida, Gainesville, FL.

- Jadir, A., & Maazouz, Y. (2022). *Fighting information distortion on social media: Why digital literacy is critical today? The Deaf's perspective as example*. Paper presented at Quelles Compétences à l'Ere des Médias Numériques? Ibn Zohr University, Agadir, Morocco. Retrieved from <https://www.researchgate.net/publication/361468117>
- Jamieson, K. H., & Cappella, J. N. (2008). *Echo chamber: Rush Limbaugh and the conservative media establishment*. Oxford, UK: Oxford University Press.
- John, O. B. (2020, November 17). *COVID-19 and Migant laborers in Kuwait*. Retrieved from <https://www.mei.edu/publications/covid-19-and-migant-laborers-kuwait>
- Khalifa, N. E. O. (2021). *Rethinking the dimensions of comparing media systems in authoritarian regimes: An analysis of post Arab Spring media systems in Egypt and Tunisia* (Doctoral dissertation). Freie Universität Berlin, Berlin. Retrieved from <https://refubium.fu-berlin.de/handle/fub188/41394>
- Khamis, S. (2020, December 18). *Media use and its anomalies: A decade after the Arab Spring*. Washington, DC: Arab Center. Retrieved from <https://arabcenterdc.org/resource/media-use-and-its-anomalies-a-decade-after-the-arab-spring/>
- Khoury, P., Azar, E., & Hitti, E. (2020). COVID-19 response in Lebanon: Current experience and challenges in a low-resource setting. *Jama*, 324(6), 548–549. doi:10.1001/jama.2020.12695
- Melumad, S., Meyer, R., & Kim, Y. D. (2021). The dynamics of distortion: How successive summarization alters the retelling of news. *Journal of Marketing Research*, 58(6), 1058–1078. doi:1177/0022243720987147
- Michaelson, R. (2020, March 15). Egypt: Rate of coronavirus cases “likely to be higher than figures suggest.” *The Guardian*. Retrieved from <https://www.theguardian.com/world/2020/mar/15/egypt-rate-coronavirus-cases-higher-than-figures-suggest>
- NessmaTV. (n.d.). *Home* [Facebook page]. Retrieved February 16, 2022, from <https://www.facebook.com/NessmaTV>
- NessmaTV. (2020a, July 16). *Coronavirus: The COVID-19 Center for housing irregular migrants to open soon* [Status update]. Facebook. Retrieved from <https://www.facebook.com/NessmaTV/posts/10158141606122795>
- NessmaTV. (2020b, September 13). *Coronavirus is an ordinary disease, which is less severe than a common cold* [Status update]. Facebook. Retrieved from <https://www.facebook.com/NessmaTV/posts/10158306998607795>

- NessmaTV. (2020c, September 18). *A Tunisian vaccine against Corona will be ready in November* [Status update]. Facebook. Retrieved from <https://www.facebook.com/NessmaTV/posts/10158318981457795>
- NessmaTV. (2020d, September 30). *Corona in Tunisia: A fiercer wave in the coming weeks* [Status update]. Facebook. Retrieved from <https://www.facebook.com/NessmaTV/posts/10158347921827795>
- NessmaTV. (2021a, January 11). *We are currently recording a death every 25 minutes* [Status update]. Facebook. Retrieved from <https://www.facebook.com/NessmaTV/posts/10158603756922795>
- NessmaTV. (2021b, January 28). *Tunisia is the first Arab country in managing the COVID-19 crisis* [Status update]. Facebook. Retrieved from <https://www.facebook.com/NessmaTV/posts/10158655772047795>
- Newman, N., Fletcher, R., Kalogeropoulos, A., Levy, D. A. L., & Nielsen, R. K. (2019). *Reuters Institute digital news report 2019*. Oxford, UK: Reuters Institute for the Study of Journalism.
- Nguyen, A., & Catalan, D. (2020). Digital mis/disinformation and public engagement with health and science controversies: Fresh perspectives from Covid-19. *Media and communication*, 8(2), 323–328. doi:10.17645/mac.v8i2.3352
- Okonji, C. O. (2020). Ethical issues in the Nigerian media industry and their implications for professionalism. *International Journal of Research and Analytical Reviews*, 7(3), 768–773.
- Otay, D. (July 10, 2020). *How Tunisia's COVID response demonstrates governmental dysfunction*. Fikra Fourm. Retrieved from <https://www.washingtoninstitute.org/pdf/view/1096/en>
- Richter, C., & Kozman, C. (2021). *Introduction*. In C. Richter & C. Kozman (Eds.), *Arab media systems* (pp. xi–xliv). Cambridge, UK: Open Book Publishers.
- Riou, J., & Althaus, C. L. (2020). Pattern of early human-to-human transmission of Wuhan 2019 novel coronavirus (2019-nCoV), December 2019 to January 2020. *Euro Surveillance*, 25(4), 1–5. doi:10.2807/1560-7917.ES.2020.25.4.2000058
- Ritchie, H., Mathieu, E., Rodés-Guirao, L., Appel, C., Giattino, C., Ortiz-Ospina, E., . . . Roser, M. (2022). *Coronavirus (COVID-19) testing: World map: Total tests performed relative to the size of population*. Retrieved from <https://ourworldindata.org/coronavirus-testing#world-map-total-tests-performed-relative-to-the-size-of-population>
- Rugh, W. A. (2004). *Arab mass media: Newspapers, radio, and television in Arab politics*. Westport, CT: Praeger Publishers.

- Sulistiadi, W., Slamet, S. R., & Harmani, N. (2020). Management of COVID-19: Public stigma in Indonesian society. *Kesmas: National Public Health Journal*, 15(2), 70–76.
- Timmer, J. (2019). Potential FCC actions against “fake news”: The news distortion policy and the broadcast hoax rule. *Communication Law and Policy*, 24(1), 1–53.  
doi:10.1080/10811680.2018.1551020
- Tsui, L. (2010). *A journalism of hospitality* (doctoral dissertation). University of Pennsylvania, Philadelphia, PA.
- Tymbay, A. A. (2022). Manipulative use of political headlines in Western and Russian online sources. *Discourse & Communication*, 16(3), 346–363. doi:10.1177/17504813221101824
- Wahl-Jorgensen, K., & Hanitzsch, T. (2009). *The handbook of journalism studies*. London, UK: Routledge.
- The World Bank. (2020). *GCC countries back on path to economic growth after contraction due to the pandemic* [Press release]. Retrieved from <https://www.worldbank.org/en/news/press-release/2021/08/03/gcc-countries-back-on-path-to-economic-growth-after-contraction-due-to-the-pandemic>
- World Health Organization. (2020, March 11). *WHO Director-General's opening remarks at the media briefing on COVID-19*. Retrieved from <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- World Health Organization. (2022a). *Daily cases and deaths by date reported to WHO*. Retrieved from <https://covid19.who.int/WHO-COVID-19-global-data.csv>
- World Health Organization. (2022b). *WHO coronavirus (COVID-19) dashboard*. Retrieved from <https://covid19.who.int/>
- Xu, Z. (2023). Examining US newspapers' partisan bias in COVID-19 news using computational methods. *Communication Studies*, 74(1), 78–96. doi:10.1080/10510974.2023.2169729
- Youm7. (n.d.). *Home* [Facebook page]. Retrieved February 3, 2022, from <https://www.facebook.com/Youm7>
- Youm7. (2020a, March 20) *Received by the Minister of Health during a visit to #Beijing: Secrets of the Chinese document to combat #Coronavirus* [Status update]. Facebook. Retrieved from <https://www.facebook.com/Youm7/posts/4417941891609772>
- Youm7. (2020b, March 21). *The Minister of Health warns of the Iranian scenario* [Status update]. Facebook. Retrieved from <https://www.facebook.com/Youm7/posts/4420181324719162>



Youm7. (2020c, October 7). *A glimmer of hope, new surprises about the Egyptian #Corona vaccine* [Status update]. Facebook. Retrieved from <https://www.facebook.com/watch/?v=2452504215048609>

Zaher, W. A., Ahamed, F., Ganesan, S., Warren, K., & Koshy, A. (2021). COVID-19 crisis management: Lessons from the United Arab Emirates leaders. *Frontiers in Public Health, 9*(724494). doi:10.3389/fpubh.2021.724494