

# Health communication approach of Arab social media during COVID-19

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**ملخص باللغة العربية**

**نهج الاتصال الصحي لوسائل التواصل الاجتماعي العربية خلال فيروس كورونا**

في العامين الماضيين، أدت جائحة كورونا إلى زيادة الاهتمام بالإعلام الصحي. في المنطقة العربية، أولى الجمهور اهتمامًا كبيرًا بالشؤون الصحية على حساب الأخبار السياسية التي طغت على المنطقة في العقد الماضي. في هذا الصدد، تسعى هذه الدراسة إلى توصيف الإعلام الصحي، كمجال بحثي متسارع النمو وخاصة على وسائل التواصل الاجتماعي. في سبيل القيام بذلك، يتناول هذا البحث خصائص الأخبار التي تنشرها وسائل إعلامية عربية على موقع فيسبوك حول جائحة كورونا. منهجياً، تم استخدام كل من تحليل المحتوى والتحليل الموضوعي لـ 1102 منشورًا ظهرت على ست صفحات إخبارية بارزة على فيسبوك تنتمي إلى وسائل إعلام إخبارية محلية في ست دول عربية: مصر والمملكة العربية السعودية والإمارات العربية المتحدة والكويت ولبنان وتونس. أظهرت النتائج ثلاث فئات مهمة من المواضيع، نسجت حولها صفحات الفيسبوك منطقتها في الإعلام الصحي: (1) انتشار الفيروس؛ (2) معدلات الوفيات؛ و(3) النطاق العالمي للوباء. كما اعتمدت الصفحات على منطقتي متحفظ في التعامل مع التداعيات المحلية للأزمة مقابل منطقتي مرنة في تصوير الأزمة في الدول الأجنبية.

**كلمات مفتاحية**

الإعلام الصحي - جائحة كورونا - المنطقة العربية - مواقع التواصل الاجتماعي - فيسبوك

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### Abstract

In the last two years, Covid-19 pandemic has given rise to health communication. In the Arab region, the public has paid much attention to health issues at the expense of political affairs that overwhelmed the region in the last decade. In this respect, this article seeks to characterize health communication, as a growing research field specifically on social media. In doing so, the article investigates the characteristics of the

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news posted on Facebook by major Arab media outlets about Covid-19 pandemic. A content and thematic analysis were used to analyze 1102 posts extracted from 6 prominent news Facebook pages that belong to major local news media channels in six Arab countries: Saudi Arabia, United Arab Emirates, Kuwait, Egypt, Lebanon, and Tunisia. The results showed three significant categories of themes, around which the Facebook pages have stitched their health communication approach: (1) the spread of the virus; (2) death rates; and (3) the global scope of the pandemic. In addition, a discreet logic was adopted by the pages in dealing with the local consequences of the crisis in return for a flexible logic in the portrayal of the crisis in foreign countries.

### **Key words**

Health communication – Crisis communication - COVID-19 pandemic – Arab region – social media – Facebook

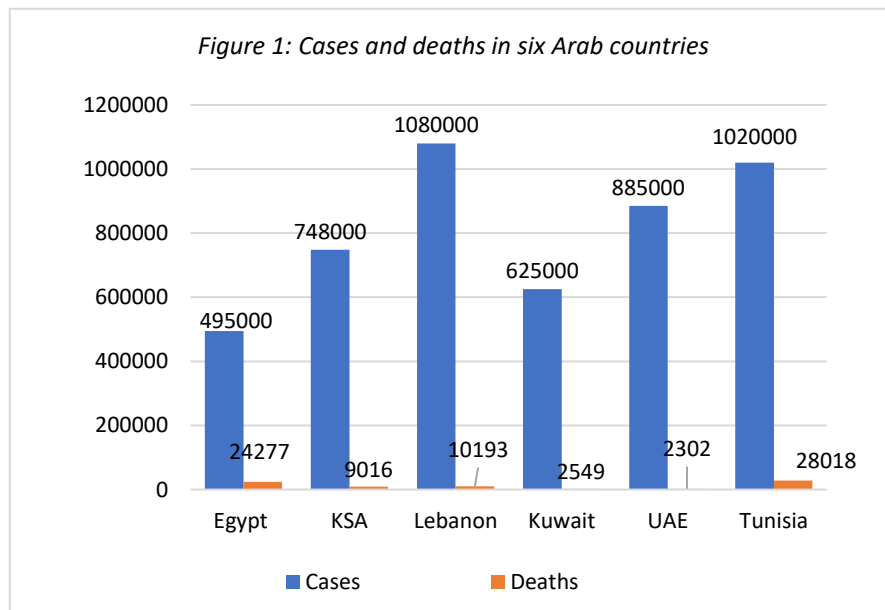
### **Introduction**

With about 500 million infections and more than 6 million deaths around the world (World Health Organization, 2022), COVID-19 is considered an unprecedented health crisis that is still unfolding until today. The media around the world has adopted different strategies to contain the virus and raise health awareness among the public.

The nature of the pandemic as a crisis has allowed media channels, according to Kalocsányiová, Essex and Poulte (2021), to use a mix of crisis and health communication messages. This article is interested specifically in health communication messages posted on Facebook by Arab media channels, and it also pays attention to crisis communication messages that contain explicit or implicit health messages.

In the Arab world, millions have been infected and tens of thousands have died of the pandemic. The crisis has marked the need for effective health communication to raise people's awareness about the pandemic and its consequences. Media channels in the region, which does not enjoy a sufficient margin of freedom, have published considerable amount of health-related content, comprising campaigns, press releases, news, etc. In this context, this article seeks to characterize the health messages reported by Arab media channels during the pandemic.

Six Arab countries are the focus of this article (Egypt, Kingdom of Saudi Arabia (KSA), Lebanon, Kuwait, United Arab Emirates (UAE), and Tunisia), each of which has witnessed different levels of the infection and governmental response. As shown in Figure 1, a total of about 5 million cases have been infected with the virus in the six countries, in addition to more than 76 thousand deaths (Google News, 2022). These numbers reflect the size of the crisis and the need for an effective health communication.



Before COVID-19 pandemic, media in the Arab region did not pay much attention to health guidance, and so did the people. Indeed, media in the region was immersed in local politics since the Arab Spring, but the pandemic forced them to rearrange their priorities, drawing unprecedented attention to health communication messages at least temporarily.

Dealing with the pandemic has not been easy, where media in the region lacked, for example, the accurate information about the number of infections and deaths. Such challenges have confused people regarding the scale of the crisis and how to deal with it. However, the pandemic has supported health communication and allowed a health culture to

emerge. In this respect, this study seeks to answer the question: how the Arab media pages on Facebook thematized COVID-19 news?

### Health communication and post-truth world order

For the first time, a health crisis occupies a considerable space in the media and in people's daily conversations (Khaira, 2020). The global scale of the pandemic has allowed journalists to receive information from international sources such as the World Health Organization, the United States Food and Drug Administration and global media outlets. Therefore, health communication has been globalized, allowing the emergence of a global health culture. This culture has been formed around some new words such as outbreak, pandemic, prevention measures, home isolation, infection, disinfection, and quarantine.

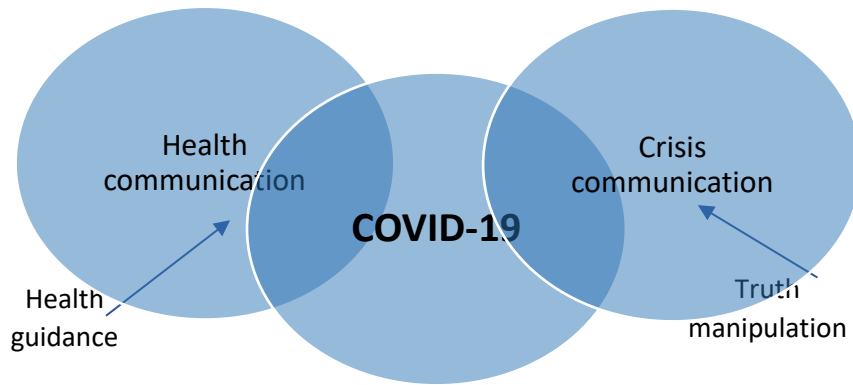


Figure 2: the relationship between crisis and health communication during COVID-19

The media has extensively presented health instructions about the best food to eat, healthy lifestyle, drugs needed and prevention measures. These instructions have been presented along with other news about the consequences of the crisis, including the infection rate, deaths, economic consequences, etc. (Ratzen, Sommarivac & Rauh, 2020). This is what I meant by the overlap between health and crisis communication resulted from covering COVID-19 as a health crisis (see Figure 2). Hence, the theoretical approach of this study is based on my understanding of the intersection between health and crisis communication, which produces a content associated with both types.

Furthermore, this paper is guided partially by post-truth world order theory to explain any manipulation of the pandemic news on social media. As Cosentino (2020, p. 3) explains “we now live in a post-truth world, where emotions and beliefs trump evidence-based arguments, where the distinction between truth and lies has become increasingly blurred, and where the very notion of truth seems to have all but disappeared”. The main idea of the theory is that citizens in post truth world would get manipulated by state and non-state actors.

Notably, the integration between health and crisis communication, depicted in Figure 2, is seen in this study from a simple approach based on two assumptions:

- (1) Covid-19 health communication provides information and guidance to the public in the Arab region; and
- (2) Covid-19 crisis communication manipulates, at least partially, the truth of the crisis in the Arab region.

Significantly, the post truth world order theory is used in this study not to guide the analysis, but rather to explain the results of the study and support its arguments. Using the theory this way would allow a better understanding of the nature of COVID-19 news on social media and its credibility. This study does not adopt a proactive analysis about the lack of COVID-19 news credibility on social media. Instead, it seeks to pinpoint the themes of COVID-19 news and whether they were manipulated by the Arab media or not. Highlighting the manipulation of news is important in light of the decline of trust in digital news that amounted 38% as reported by Reuters Institute for the Study of Journalism (Newman, Fletcher, Robertson, Eddy, & Nielsen, 2022, p. 13).

### **Literature review**

COVID-19 pandemic has given rise to health communication to the degree that one of the main journals in the field “health communication” has received in 2020 its largest ever number of submissions (King, 2021, p. 267). This is simply because this type of communication plays, as also argued by Radwan (2020, p. 4), a crucial role during health crises. Khaira (2020, p. 51) addressed the manifestations of this role

during the pandemic which included, for example, organizing intensive awareness campaigns that focused on defining the pandemic, explaining its consequences, and avoiding the infection.

The literature on health communication and COVID-19 has focused on the role of digital applications and social media in providing health messages and information to the public. For example, Arghittu, et al. (2021) addressed the role of an official website in supporting citizens during the pandemic in Italy. They found that social isolation has strengthened people's relationship with communication technology and health websites. In a similar vein, Hamza (2020) found a great attention was paid by an Algerian official Facebook page during COVID-19 to preventive and health issues compared to other issues. In addition, Alataar (2021) found a significant relationship between the dependence on new media and the Egyptian's health awareness.

One of the factors that has threatened the health role of the media is the disparity in the access to communication technology and health services. OKalocsányiová, Essex and Poulter (2021) found inequalities between deprived and less deprived areas in access to health guidance and information in London during COVID-19 pandemic. Such differences appeared also in other countries, for example, in the Arab region, Covid-19 health messages were found, by Al-Shorman (2021), to be poor and out of the interest of the Arab media.

In addition to the disparity between people in approaching communication technology and receiving health information, they have also exposed to different sources of information about COVID-19. In this context, Yalew, Yitayew, Mohammed and Gezihagne (2021) identified the most sources of health information used by Ethiopians during COVID-19, which included broadcast media, community outreach, social media, digital media and print media, respectively. Following the sources of COVID-19 information, Mesawa (2020) showed that Twitter was the most important source of COVID-19 health information for Saudis, followed by state websites, Arab news websites, electronic newspapers and Facebook.

Some studies focused on people's perception of the health communication efforts made by government. Venkatraman and

Manoharan (2021) showed that the Indians were unsatisfied about the government services provided during the pandemic, but experts were satisfied about the strategy of the government to combat the virus. Ethiopian youth on the other hand, did not pay enough attention, as found by Yalaw, et al., (2021), to the government preventive measures.

A large part of studies investigated the role of social media as a platform for health communication. For example, Karanfiloglu (2021) emphasized that social media enabled people to receive enough information about the pandemic and helped them to cope with the virus. Similarly, Khamis and Geng (2021) found that social media were powerful outlets in mitigating COVID-19 through providing health awareness information. In addition, Vincent (2020) showed that social media played a key role in disseminating COVID-19-related information in Ghana, but they also spread misinformation that created panic and fear. The results on the importance of social media during the pandemic are in line with the argument made by Arghittu, et al. (2021) that “the current pandemic, and the resulting social isolation imposed on the population, has further contributed to the increase in use of digital platforms”.

Another group of studies investigated the shape of health communication and the message appeals used to convince the public. Stolow, Moses, Lederer and Carter (2020) addressed the fear appeals used in COVID-19 health communication (e.g. sensationalized language, graphic images and the negative consequence of avoiding recommended behaviors) and they showed that these appeals stimulated anxiety. These results are in line with Al-Shorman’s (2021) study, which showed that traditional and new media have fallen into the trap of excitement and intimidation during the pandemic. In order to avoid the uncertainty and misinformation during Covid-19 crisis, Migahid (2021) recommended that media channels have to depend on known sources such as physicians and health experts to provide true and believable health information.

### **Methodology**

A content analysis was used to quantitatively characterize Facebook posts of Arab news media channels. In addition, a thematic analysis was

used to qualitatively identify the main themes covered by the content of the posts. Both methods allowed a holistic characterization of the content published by six Arab Facebook pages selected for this study (@alkhaleej, @akhbaar24, @alqabasnewspaper, @Youm7, @AlakhbarNews and @NessmaTV). These pages belong to local news media channels in 6 Arab countries (UAE, KSA, Kuwait, Egypt, Lebanon, and Tunisia), each of which has had different Corona situation.

### Content analysis

The content analysis (Krippendorff, 2018) was used to analyze the posts of the six Arab Facebook pages related to COVID-19 in the last two years (2020 and 2021). These two years were selected because they witnessed the emergence, progress and peak of the pandemic, where the crisis was in the focus of the media and people around the world.

The data analyzed in this article were extracted using the search field of each page to gather specific posts related to the topic of study. Different search terms were tried in the first place such as COVID, vaccine, virus, Corona, prevention measures, China, etc. Then, only two words were found to aggregate the greatest number of posts related to the pandemic (Corona and COVID), since they are common in most pandemic-posts. Thus, the data collection process depended eventually on these two words.

A total of 1102 posts were gathered from the 6 pages. They were exported manually to an excel sheet including the whole metadata of the posts (the post content, date, link, image, number of likes, comments, shares, love, haha, care, wow, angry, and sad). Thus, the data set included a rich content obtained from the 6 pages (see Table 1).

**Table 1: the number of COVID- posts analyzed**

Pages	Posts analyzed	%
Alkhaleej (UAE)	200	18.1
Youm7 (Egypt)	195	17.7
Alakhbar (Lebanon)	192	17.4
NessmaTV (Tunisia)	189	17.2
Alqabas (Kuwait)	185	16.8
Akhbaar24 (KSA)	141	12.8
Total	1102	100



The content was analyzed based on some key analytical elements, such as the number of pages followers, frequency of the posts published, components of the posts, user's interactions with the posts, and the orientations of the posts. The analysis process has also considered the meaning of each element, attempting to understand the approach of health communication adopted by the Arab media.

### **Thematic analysis**

The thematic analysis (Forbes, 2021) has mainly used to synthesize the key themes that describe the COVID-19 content posted by the 6 pages. This method allowed a better understanding of the structure of the content and its context in relation to the policy of the pages.

Procedurally, the data were exported to NVivo software (version 13) for a thematic qualitative analysis. The analysis process has followed the following four stages.

(1) Reading the posts and taking notes about the meaning of posts in the context of the health communication approach followed by the pages. In this stage, an initial link between the components and the nature of the content of each page has been made.

(2) An open coding of the data based on the most important words repeated in the content. The word frequency function of NVivo was used to automatically extract the number of words repeated in a scheduled order, which allowed a classification of these words.

(3) A categorization of the words repeated the most has been made. This process aimed at grouping the main words that belong to the same meaning or context, which eventually produced meaningful themes.

(4) Interpreting the logic behind the themes, in order to uncover the meaning of the content used, by the Arab media, to build a health communication approach.

## **Results**

### **Mapping COVID-19 posts**

This article has addressed the news coverage of COVID-19 pandemic in 6 Facebook pages that belong to six Arab countries. The 6 pages have

gained large popularity considering the number of likes of each page. Egypt's Youm7 page came in the first place with 20 million likes, followed by the Tunisian NessmaTV (6.8 million), the Emirati Alkhaleej (2.3 million) and the Lebanese Alakhbar (2.1 million). Then, two other pages came in the end with much less followers: the Kuwaiti Alqabas (316 thousand), and the Saudi Akhbaar24 (213 thousand).

**Table 2: Facebook pages' likes and followers**

Pages	Page likes	Followers
Youm7	20M	25M
Akhbaar24	213K	238K
Alkhaleej	2.3M	2.4M
Alqabas	316K	599K
Alakhbar	2.1M	2.2M
NessmaTV	6.8M	7.4M

Notably, the pages published similar number of posts about COVID-19, except Akhbaar24 that posted the lowest number (see table 2). This means that the number of likes and followers does not lead the pages to maximize or minimize the number of posts. It is also worth noting that even the size of the countries, in which the Facebook pages work, did not affect the number of the posts. This contradicts the logical basis that large countries such as KSA and Egypt should be covered with more stories compared to other small countries such as Kuwait and UAE.

With respect to the components of the posts analyzed, they usually included some of the following: title, image, video and a link leading to the website of these pages. The dominant form of posts contained a title, image and a link. Remarkably, three pages (Alkhaleej, Akhbaar24, and Youm7) have posted a reasonable number of videos: 44, 36 and 25 respectively. The other three pages (Alqabas, Alakhbar, and NessmaTV) did not pay enough attention to videos; they only posted 6, 5 and 5 videos respectively. Although its importance in attracting attention, videos posted by the 6 pages did not generate enough interaction, where Akhbaar24 that published a large number of videos has received the lowest percentage of users' interactions, while NessmaTV that published the lowest number of videos has received a higher percentage of users' interactions.

### User's interactions with COVID-19 posts

Interactions with posts is a significant indicator of the prevalence and success of the pages on social media. The results showed that COVID-19 posts gained considerable interactions from Facebook users. Youm7 page ranked first with 85.6%, followed by Nesma TV (10.2%) and Elkhaliq (1.9%). In addition, the three other pages gained little interactions, Elqabas captured 1.6%, Elakhbar 0.4%, and Akhbarak 0.3% (See Figure 3). Interestingly and reasonably the pages that have had the largest number of followers have often gained the largest percentage of users' interaction. The exception of this principle is Elqabas that gained more interactions than Alakhbar that has more followers.

**Table 3: the Arabs' interactions with COVID-19 news on Facebook**

Interactions	Youm7	Akhbarek24	Elkhaliq	Elqabas	Alakhbar	Nesma	Total
Comment	247916	418	5706	4563	701	34366	293670
Share	406300	464	19068	4857	773	30632	462094
Like	1428112	7167	29650	39673	11621	190192	1706415
Love	61222	57	2785	290	21	5557	69932
Ha-ha	85377	18	1991	324	16	17367	105093
Care	6915	1	479	35	2	494	7926
Wow	31395	27	101	153	30	17978	49684
Angry	19781	7	18	99	136	1290	21331
Sad	400400	195	348	686	175	22446	424250
<b>Total</b>	<b>2687418</b>	<b>8354</b>	<b>60146</b>	<b>50680</b>	<b>13475</b>	<b>320322</b>	<b>3140395</b>

Out of the total interactions of the users, likes came first (1.706.415) followed by shares (462.094), sad (424.250) and comments (293.670). Surprisingly, emotions like ha-ha, wow, and love, which are unrelated to the tragic news of the pandemic, surpassed other emotions like care (7926) and angry (21331), which are supposed to express better the feelings during the crises (see Table 3). This could be considered an apathy toward, or a mockery of, the Corona situation in the region.

### Thematizing COVID-19 in the Arab media

COVID-19 has given rise to health communication around the world, considering the considerable amount of health content published on all platforms. In this respect, this article seeks to characterize health communication messages that addressed the pandemic to better

understand the logic behind dealing with health crises in the Arab media.

In general, the results showed that the Arab media did not provide enough explicit health instructions to the public during the pandemic. Instead, they focused on the virus as a crisis: infections, deaths, prevention measures and economic consequences. However, many news that dealt with the disastrous part of the crisis included indirect health warning to the people in terms of staying away from the virus.



Figure 4: a word cloud of COVID-19 data extracted from Arab Facebook pages

One of the indicators used to characterize COVID-19 content is the frequency of the words repeated in the 6 Facebook pages. In total, 4233 words (that contain three or more letters) were used in the content published by the pages. Because two search terms were used to collect the data (Corona and COVID), they were the most words to appear in the text. Corona came in the first place (5.4% of the total frequencies) followed by COVID (3.3%) (see Figure 4). A closer look at all words used in the text, we can identify three important word categories that were repeated the most in the text. These categories compose three meaningful themes that represent the main focus of the data: (1) the spread of the virus; (2) death rates; and (3) the global scope of the crisis.

## 1- Spread of the virus

The first category of words repeated in the text is the words related to the spread of the virus, such as virus (1.9%), case (1.7%), infection (1.6%), the health ministry (1.4%), cases registration (1.1%), new (1.1%), vaccine (0.7%), recovery (0.6%), Allah (0.6%), the world (0.6%), announce (0.5%), today (0.4%), number (0.4%), urgent (0.4%). Significantly, this category of words has centered around the Health Ministry as the official source of information responsible for following cases, deaths, and prevention measures.

In relation to this theme (the spread of the virus), the 6 pages have directed health messages to the people, such as facing the virus (0.3%), combating the virus (0.2%), precautionary measures (0.1%), infection warning (0.1%), health advice (0.02%), and wearing masks (0.07%). Much of the messages repeated in relation to the spread of the virus tried, in different levels, to minimize the problem and to applaud the governments' role in fighting the virus. For example, Youm7 once reported "Anti-Corona Committee: Egypt is ready to confront the Omicron mutator". Similarly, Akhbarak 24 mentioned "#Health: We continue to monitor the mutation of (Covid-19), and the health situation in the #Kingdom is reassuring".

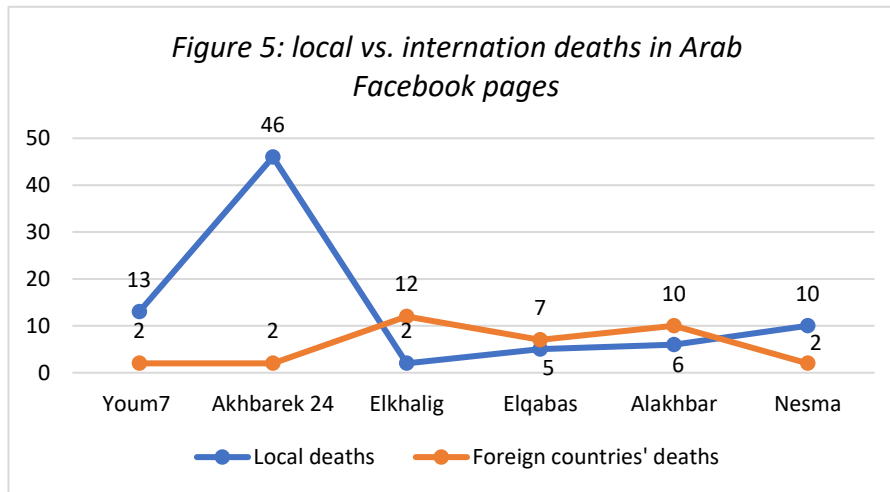
While the pages attempted to disregard the local problems related to the spread of the virus, they tended to highlight the challenges of foreign countries. For example, the Lebanese Elakhbar has reported "88,000 in 24 hours: Britain records a record number of Covid-19 cases". By highlighting the shortage in advanced countries and stressing the difficulty of the crisis in all countries, the Arab media wanted to alleviate the anger of the people toward the failure of their local governments.

Moreover, most pages did not pay enough attention to the efforts of the people in fighting the virus or the consequences they suffered. Some pages have even attempted to place the responsibility of the virus outbreak on the shoulders of the people. For example, Youm7 indirectly blamed people by stating that "Egyptian Medical Syndicate calls on citizens to abide by the precautionary measures: Corona is fierce and spreading".

## 2- Death rates

Another category of words revolved around the death rate caused by the virus. The word death appeared 0.4% of the total words of the 6 pages, followed by some other related words, such as total (0.3%), to become (0.3%), God bless them (0.3%), Thank God (0.3%), minister (0.3%). In general, as a single word, death ranked late in the text behind several words mentioned earlier in the previous category. Thus, the pages, to some extent, marginalized death cases, attempting to hide the negatives associated with declaring the number of deaths.

It is worth noting that COVID-19 deaths were mentioned in some pages while talking about foreign countries rather than the countries these pages work in (see Figure 5). Surprisingly, three pages (Elkhalig, Elqabas, and Alakhbar) have shown more interest in the Corona deaths that occurred internationally, ignoring to a great extent the deaths in their local countries. Another page that can also be included with these three pages is Youm7 with 13 mentions of local deaths, 6 of which had a positive context (decrease of the death number) and 5 were related to single celebrity death.

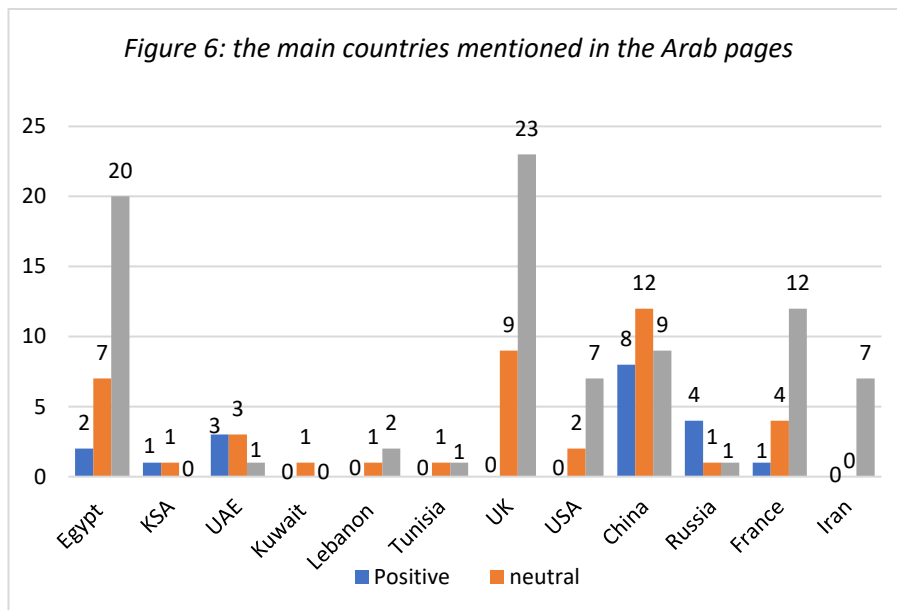


## 3- The global scope of the crisis

Several foreign countries were covered by the 6 pages comprising another theme category. Upon counting the frequencies of the countries, the coverage of each page to the country it works in was excluded to

stand on how the foreign countries were represented. The results showed that the most mentioned countries are the UK, Egypt, China, France, USA, UAE, Iran, Russia, Lebanon, KSA, Tunisia and Kuwait.

Most countries, especially western ones, covered by the pages were portrayed in a negative context, such as the UK, France, and the USA (see Figure 6). This can be attributed to the attempt of the pages to relieve the pressure placed on local governments as a result of the mismanagement of the crisis.



It is also worth mentioning that some countries have been treated negatively on the ground of the relations between these countries and the country of the pages. Iran specifically has only been mentioned negatively as a result of its strained relationship with Arab countries. In contrast, China has been presented positively, specifically by the Egyptian page Youm7 perhaps for the Egypt's use of the Chinese vaccine. It is to say that health communication messages in the Arab media have been affected by political considerations.

### Discussion and conclusion

This article has addressed the characteristics of COVID-19 health communication messages in 6 Arab Facebook pages. In doing so, a

quantitative content analysis of 1102 posts was used to map the posts, and a qualitative thematic analysis was employed to synthesize key themes and check their orientations.

As expected, the results showed that most Facebook posts did not provide enough explicit health guidance to the people. This can be interpreted as the Facebook pages considered in this article are public news pages interested in providing news about the crisis more than guiding the people to deal with the virus. The lack of health guidance was also proven by Essex and Poulter (2021), who showed less access to health information and guidance in London especially for deprived areas. Similarly, Al-Shorman (2021) found that health messages were poor in the Arab Region and did not receive enough attention from the Arab media.

However, the coverage of the crisis has included an implicit health guidance to the people embodied in the coverage of the consequences of the virus. This explains what was mentioned earlier in commenting on the theoretical approach of the study: the overlap between health and crisis communication, which usually occurs during covering health crises. Hence it can be argued that covid-19 media coverage was a product of both health and crisis communication.

With respect the interaction with the posts, Facebook users interacted with the COVID-19 text in different levels. The Egyptian Youm7 has received the most interactions from the users, thanks to the large number of its follower sustained by the large number of Egyptian populations. Surprisingly, some emotions were used extensively by the users such as “ha-ha” and “love” contradicting the nature of COVID-19 sad news. This can be considered a mockery of a situation that people do not have the ability to affect.

Interestingly, the Article has pinpointed three related categories of words that formed three meaningful themes, around which the Arab media developed their approach of health communication.

These themes included the spread of the virus, death rate, and global scope of the crisis. In covering these themes, the pages were keen not to adopt a critical tone toward their local governments, except the



Tunisian NesmaTV. In contrast, the Facebook pages portrayed foreign countries in negative contexts, which refers to the attitude of these pages to hide local negatives in return for highlighting the foreign ones. This manipulation highlights the desire of the Facebook pages to transfer specific information about the pandemic to serve official actors. In a way or another, this proves the post truth world order theory that suggests the lack of reality on social media, especially in terms of politicized issues.

To conclude, health communication in the Arab Facebook pages has reflected the logic of the media in the region, that tends usually to adopt the official narrative of events. This approach could be harmful, especially when dealing with health crises that require a greater degree of transparency.

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