

# Social media, media freedom, and misinformation: Challenges faced by journalists in the Middle East and North Africa during early COVID-19

Journal:	Global Media and Communication		
Manuscript ID	GMC-24-0075.R1		
Manuscript Type:	Original Manuscript		
Keywords:	Arab news workers, Arab journalism, Social media, COVID-19, Media freedom, Misinformation, Investigate journalism		
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SCHOLARONE™ Manuscripts Social media, media freedom, and misinformation: Challenges faced by journalists in the Middle East and North Africa during early COVID-19

#### **Abstract**

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### Introduction

For many Arab news workers, social media networks have significantly evolved in shaping the landscape of news gathering, reporting, and audience engagement (Miladi, 2011; AlSharekh, 2016; Mansour, 2018). For example, most leading news organisations in the Arab world (e.g., *AlJazeera, Al-Arabiya, Arab News*) have established and developed robust social media presences, highlighting the growing significance of these platforms in journalism practices. This has promoted news outlets to mandate and require journalists to acquaint themselves with the various social media platforms, reflecting a fundamental shift in news dissemination strategies (Cottrill, 2015; Powers and Zambrano, 2017; Mansour, 2018; Elareshi, Alsridi and Ziani, 2020). With traditional reporting avenues disrupted by lockdown and safety concerns, social media platforms provided a 'lifeline' for journalists to maintain their journalistic work, with X (formerly Twitter) and Facebook witnessed heightened activity from Arab journalists for disseminate breaking news and engage with their audience.

However, such adaption of social media by Arab journalists brought unique challenges and risks such as misinformation, online harassment and media freedom (ATUC, 2020; AlAashry, 2022). Although there has been much research exploring the use of social media by Arab journalists during periods of political turmoil, most notably during the 2011 Arab uprisings (Al-Rawi, 2015) - large-scale studies that examine the use of social media by Arab news workers during the global COVID-19 health crisis remains a noticeable gap in comprehensive research examining their engagement with such platforms, (for further information see, e.g., Al-Jalabneh and Safori, 2020).

The initial Arab nation to officially acknowledge COVID-19 within its population was the United Arab Emirates (UAE), which documented five cases in January 2020. Followed by Egypt also reported cases (Alandijany, Faizo and Azhar, 2020; Alwahaibi *et al.*, 2020) and others. By May 2020, the 22 Arab countries (12 in Asia and 10 in Africa) collectively reported a substantial number of COVID-19 cases (over 290,000 cases), ranking fourth globally in confirmed COVID-19 cases after the US, Brazil, and Russia (Alwahaibi *et al.*, 2020), accentuating the profound impact of the pandemic on the region. Although Arab countries are politically united in the Arab League (Toffolo, 2008), healthcare systems substantially differ from one country to another (Alandijany, Faizo and Azhar, 2020; AlSadr, 2021) and contribute to varied responses to the pandemic, including varying degrees of lockdowns measures.

As lockdowns were enforced and face-to-face interactions became impracticable, many journalists across the Arab world turned to social media platforms (Fenech, 2020; Quandt and Wahl-Jorgensen, 2021; Ziani *et al.*, 2021) as alternative avenues for their news gathering, audience engagement, news dissemination and information sourcing. For example, in response to the COVID-19 pandemic, Arab journalists, like others, increasingly turned to social media platforms not only for disseminating news, but also as vital sources of information. They provided real-time updates and access to both official and public sentiment, which were crucial for journalist working under the constraints of lockdowns. However, the dearth of research scrutinising the practices and challenges encountered by Arab news workers with the unprecedented prevalence of the pandemic, our study seeks to address this gap comprehensively. In doing so, our study (a) surveyed 1,443 Arab journalists from 19 countries and (b) conducted structured interviews with 19 Arab news workers (e.g., journalists, managing editors, reporters, etc.) representing 10 countries. The objective was to gain deeper insights into their experiences and challenges encountered while using social networks during early COVID-19.

Note that while this study is focused on Arab countries, the purpose is not necessarily to suggest that they are identical and as a result, we do not claim the universality of our findings or that are applicable to all Arab countries. Instead, we presented data that were conducted in the very early days of COVID-19 to provide insightful analysis on how news workers adopted social media platforms in the unforeseen situation, COVID-19. Thus, our findings indicate that Arab journalists, much like their counterparts worldwide, heavily relied on social media during the pandemic, both for obtaining information and overall audience engagement, with platforms such as Facebook and WhatsApp, known for their relatively better handling news related to COVID-19. We found through interviews that Arab news workers highlighted two primary challenges encountered in using social media during COVID-19. Firstly, the intricate relationship between social media and 'media freedom'. Secondly, the prevalence of misinformation on social media (both in depth discussed later).

Note that the nature of our work is rooted in the broader filed of media studies, focusing on the intersection of journalism and social media usage within the context of media freedom and misinformation challenges for Arab journalists during the early COVID-19 pandemic. We focused on key themes such social media adaption in journalism, media freedom and censorship during this rough time, and misinformation and journalistic integrity.

The following section reviews the literature on the adaption of social networks by journalists, Arab Journalists and the COVID-19 expansion, and the use of social media by journalists during COVID-19. This is followed by a description of the data (the participants), the data collection methods (an online self-completion questionnaire and interviews), and the data analysis methods (statistical analysis and thematic analysis). Next, we disclose our discoveries concerning: (1) the regularity of Arab journalists' engagement with social media and their favoured platforms during the pandemic; (2) social media use in tracking COVID-19-related subjects and the particular topics related to COVID-19 that were followed; and (3) the obstacles encountered in social media utilisation amid COVID-19.

#### Literature review

# Arab journalists' use of social media

The global increase in the significance of social media in journalistic practices has been well-examined (Zubiaga, 2019). This trend is equally applicable to Arab journalists, whose utilisation of social media can be delineated into three distinct phases - (1) of relative disuse before the 2011 Arab uprisings, (2) of rise in use during and after the 2011 Arab uprisings, and (3) of ever-growing importance during the recent COVID-19 pandemic, which removed in-person working practices for varying periods of time and to varying degrees throughout the region. In details, before the 2011 Arab uprisings, social media played a limited role in Arab journalism due to various factors, including a lack of requisite skills among Arab journalists and the limited adaption of social media by leading news outlets in the region (Mounir, 2017).

The second stage, which started with the 2011 Arab uprisings, witnessed a surge in social media usage among Arab journalists such as Egypt, Libya, and Tunisia turning to social media (Al-Najjar, 2011; Fahmy and Abdul Majeed, 2020). In this time of political turmoil, social media opened opportunities for direct communication and engagement with readers, but most importantly, they presented a way of bypassing Arab government information gatekeeping and spread of misinformation (Ghannam, 2011; Wolfsfeld, Segev and Sheafer, 2013; Badr, 2021). The pivotal role of social media during the 2011 Arab uprisings not only revolutionised communication dynamics, but also precipitated a decline in print news circulation. It functioned as a key channel for mobilisation and for transmitting events updates both inside and outside the Arab world (O'Rourke, 2011; Lynch, 2015; Ziani *et al.*, 2021). Overall, this has led to many Arab news outlets

to transition online and establish a robust social media presence (Dennis, Martin and Hassan, 2019), Arab journalists increasingly developed digital skills for their news production (Mansour, 2018; Ziani *et al.*, 2021).

The third stage, Arab journalists use social media as a major source of news production during the COVID-19 outbreak, as gathering news was impossible due to travel restrictions and 'remote working' practices (Badr, 2021). The pandemic caused lockdowns and bans on print publication in many countries in the region, further contributing to the decline of print news (Lund, 2020). Concern that newspaper circulation could contribute to virus transmission caused readers to stop purchasing print newspapers. The impact of the lockdowns that had prevented the circulation in the first place (Refaai, 2020). In this context, some Arab news workers have been vocal not only about the opportunities but also about the challenges imposed on their work by the pandemic and the reliance on social media (AlSadr, 2021). And yet so far, little research has been dedicated to exploring the social media practices and challenges experienced by Arab journalists during the pandemic.

# Arab journalists and the COVID-19 pandemic

In March 2020, after the World Health Organisation (WHO) declared COVID-19 a pandemic, the outbreak became a major news focus globally (Pleyers, 2020; Adam *et al.*, 2023; Tong, 2023). In the Arab region, as elsewhere, people turned to mainstream and social media for health advice and information on the virus (Ali, 2020; Fatima, 2020; Mansoori *et al.*, 2023). Most Arab health ministries used social media to disseminate public service announcements (PSAs) (Alwahaibi *et al.*, 2020). One of the main pandemic challenges on Arab journalists was that they faced job insecurity and loss of income; pressures to abruptly change their typical journalistic specialisations to now focus on the pandemic; and demands to adjust to the 'remote working' model, which became the main working model during the pandemic but was rare as a working practice in the region up until then. Faced with the demand to work from home, Arab journalists experienced pressures in terms of lack of the necessary equipment shortages to perform their work safely from a distance, unreliable internet connectivity, and difficulties in maintaining work-life balance (ATUC, 2020).

As stated above, during the early period of COVID-19, Arab journalists had to rapidly shift to remote work due to lockdown measures. For example, in Egypt, journalists who were used to conducting face-to-face interviews were forced to rely on online platforms e.g., Zoom and

WhatsApp for interviews, as also confirmed by our findings. Furthermore, throughout the pandemic, many Arab governments implemented stricter censorship measure under the pretext of combating COVID-19 misinformation. This is due to the rise of misinformation which was a pervasive challenge for Arab journalists e.g., misinformation about supposed cures and exaggerated death tolls.

The role of social media became essential tools for keeping the public informed, as traditional reporting avenues were disrupted. As stated above, Arab journalists, like many, increasingly turned to social media platforms e.g., Facebook, X, and WhatsApp to gather and disseminate news. For example, in Algerian journalists relied heavily on Facebook groups to connect with sources and reported on local COVID-19 developments.

Given the different structure of media ownership in the Arab world, the impact of the pandemic on journalism was varied across the Arab region. In Lebanon, journalists had relatively more freedom to report COVID-19 news compared to other Arab countries due to the outright censored. Moreover, interviews conducted with journalists from diverse regions (e.g., the US, Namibia, South Africa, Zimbabwe) have consistently highlighted the ability to interact with individuals removed in person during the COVID-19 lockdowns, many journalists saw their pandemic sources starting to distribute official statements via social media and consequently, journalists also started to spend more time than usual searching social media aid consequently, leads (Perreault and Perreault, 2021; Ndlovu and Sibanda, 2022; Šimunjak, 2022). But research has also identified some sources as less forthcoming with information via social media and less receptive to being approached through social media than others. Government sources in particular have been identified as a notable group in that respect (see, e.g., Santos and Mare, 2021).

While social media have emerged as a valuable way to do journalistic work safely from a distance, journalists around the world also appear to converge with regard to the main difficulty presented by the use of social media for professional purposes during COVID-19, the widespread misinformation on social media (Perreault and Perreault, 2021). For example, in a large-scale study in which journalists from 26 emerging economies and the Global South (Trifonova Price and Antonova, 2024) were interviewed about their perceptions about the overall impact of COVID-19 on journalism (Hanusch and Mellado, 2014; Radcliffe, 2021), they identified the presence of misinformation on social media as the chief obstacle to the journalistic role of truth-telling (Radcliffe, 2021).

In a rare example of research from the Arab region, a case study of Jordan presented the efforts of a group of journalism students at Zarqa University to counter the widespread misinformation about COVID-19 on Facebook through a Facebook page dedicated to debunking false news and spreading news from credible sources (Al-Jalabneh and Safori, 2020). Their study makes an important contribution to understanding the practices and challenges of social media use for Jordanian journalists during the COVID-19, but what is currently missing is larger-scale research of Arab journalists in the entire region.

Against this background, this study seeks to explore and understand critical research questions regarding the extent of Arab news workers' adaption of social media during the early stages of COVID-19, their engagement with news on social media, and the challenges encountered during this period. In other words, it focuses on understanding how Arab journalists adapted to the unique and unprecedented situation, particularly their use of social media for journalistic practices. Our work aims at providing insights into these issues through a combination of large-scale surveys and interviews.

RQ1: How extensively did Arab journalists adopt social networks during early COVID-19?

RQ2: To what extent did Arab journalists engage with COVID-19 topics on social media?

RQ3: What challenges were encountered by Arab news workers in during COVID-19?

To address RQ1 and RQ2, this study conducted a quantitative analysis using data from a large-scale online questionnaire. RQ3 was answered by qualitative and thematic analysis of interviews with news workers (journalists and editors). This study, therefore, aims to provide insights into the evolving role of social media in Arab journalism amidst the COVID-19 pandemic. This approach allows us to explore news areas (where little prior research exists), gather descriptive data, and understand complex phenomena (e.g., censorship, media freedom, misinformation). The details of the participants and the methods of data collection and analysis are presented next.

### Methods

### The survey

To conduct the data, we collaborated with the Centre for Research, Information and Documentation in Libya to administer an online survey. The participants for the online questionnaire were recruited from 11 formal and informal Facebook groups that are popular among

Arab journalists across different countries in the region (see e.g., Al-Rawi, 2020). These Facebook groups serve as vibrant online communities where Arab journalists share information, discuss industry trends, and engage in professional networking. A list of the analysed Facebook groups, along with information about their membership size (Figure 1). It is important to note that due the lockdown enforcement, Facebook was perhaps the main convenience platform for conducting this research, we therefore recruited participants through it, ensuring a diverse yet focused perspective and experience with social media adaption in journalistic work.

The date collection took place between July 1st and September 30th, 2020, using a convenience sampling approach, which is considered appropriate for this type of exploratory research (Etikan, Abubakar Musa and Sunusi Alkassim, 2016). This sample method allowed us to recruit participants who were readily available and accessible, enabling us to explore the role of social media adoption by Arab journalists during the unprecedented circumstances of COVID-19. The survey was conducted online, and participants were recruited through popular Facebook groups used by Arab journalists, ensuring a diverse yet relevant sample. Such role and information in early stage of COVID-19 could not be gained otherwise. It proves to be an effective approach for acquiring comprehensive data.

It is worth noting that while the connection to the Arab region is immediately obvious from the names of most of the analysed Facebook groups (e.g., Syrian Journalists Association, Bahrain Journalists Association), this is not directly apparent for two of the groups which we analysed and further background is provided next. The Open Media Library is a Facebook group with members of both Arab academics and journalists. The Electronic Media Syndicate brings together academics and journalists from the Arab region (Ziani *et al.*, 2021).

Figure 1 lists the Facebook groups through which the survey was disseminated. While these groups are well-established among Arab journalists, we acknowledge that they may not comprehensively represent every Arab country or the entire spectrum of journalists in the region. However, the groups included members from 19 different Arab countries, ensuring a diverse sample in terms of geography, media experience, and professional background. This diversity allows us to explore key trends in the adoption of social media by Arab journalists during COVID-19.

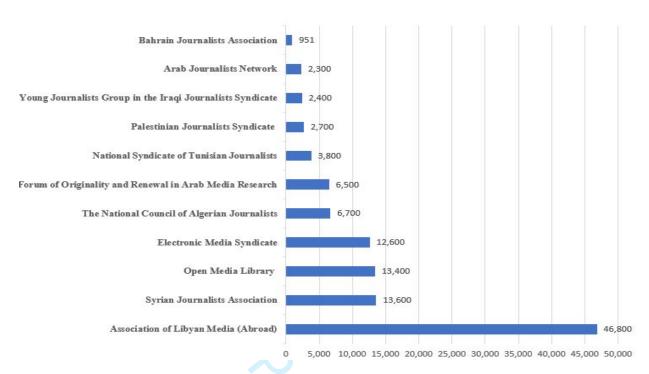


Figure 1. Facebook groups of Arab journalists

After identifying these Facebook groups as particularly suitable for this study - based on personal experience of being members of some of these groups and personal communication with Arab journalists who are members of these groups (and recommended them as particularly good channels of reaching other Arab journalists) - the link to an online questionnaire was posted once on the Facebook group's page and journalists were invited to participate in this study. Responses were collected with a total of 1,443 journalists completed the questionnaire (see Table 2 and Figure 2). The online questionnaire was in Arabic, and subsequently translated (Table 3 lists the translated questions).

**Table 2.** The distribution of the sample among Arab countries

Country	No. of participants	Total sample %	Country	<mark>No. of</mark> participants	Total sample %
<b>Egypt</b>	125	<mark>8.7</mark>	<mark>Bahrain</mark>	<mark>62</mark>	<b>4.3</b>
<mark>Algeria</mark>	<mark>114</mark>	<mark>7.9</mark>	<mark>Oman</mark>	<mark>60</mark>	<mark>4.2</mark>
<mark>Jordan</mark>	103	<mark>7.1</mark>	<b>Palestine</b>	<mark>59</mark>	<mark>4.1</mark>
<b>Lebanon</b>	102	<mark>7.1</mark>	<b>Syria</b>	<mark>58</mark>	<mark>4.0</mark>
<b>Tunisia</b>	101	<mark>7.0</mark>	Libya	<mark>57</mark>	<mark>4.0</mark>
<b>Qatar</b>	100	<mark>6.9</mark>	<mark>Iraq</mark>	<mark>42</mark>	<mark>2.9</mark>
<mark>UAE</mark>	<mark>99</mark>	<mark>6.9</mark>	<b>Yemen</b>	<mark>45</mark>	<mark>3.1</mark>
<b>Kuwait</b>	<mark>86</mark>	<mark>6.0</mark>	<b>Sudan</b>	43	3.0
Saudi Arabia	<mark>80</mark>	<mark>5.5</mark>	<b>Mauritania</b>	<mark>35</mark>	<mark>2.4</mark>
Morocco	<mark>72</mark>	<mark>5.0</mark>	<b>Total</b>	<b>1443</b>	<b>100</b>

To provide a clear understanding of the sample distribution, Table 2 reflects the relative weight of participants from the 19 Arab countries. We aimed to cover a wide geographic range, with the largest number of participants came from countries with well-established media sectors such as Egypt, Algeria, Jordan, and Lebanon. Other countries, such as Yemen, Sudan, and Mauritania, had fewer participations, which may reflect both population size and the varying levels of access to online platforms used for survey dissemination.

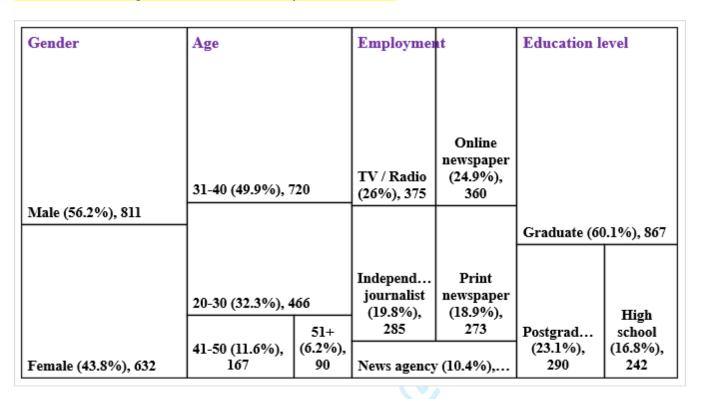


Figure 2. Demographic characteristics of the survey

Questions 1 and 2 in the online questionnaire address RQ1 regarding the type and extent of social media use during COVID-19 (Islam *et al.*, 2021). Questions 3 and 4 address RQ2 regarding the extent to which journalists used social media for COVID-19 related topics. The 14 COVID-19-related topics (all those applied) was developed by informally asking Arab journalists, known to us from our professional networks, to indicate the main COVID-19-related topics they followed on social media.

**Table 3.** The online questionnaire

Questions	Measurement	
Q1: How often did you use social media in your work during	always, sometimes, rarely,	
COVID-19?	never	
Q2: How would you rate your use of each of these social media	daily, weekly, rarely, never	
platforms in your work during COVID-19? X, Facebook,		
Instagram, Snapchat, YouTube, WhatsApp, and Viber?		
Q3: How would you rate your level of use of social media by	high, average, low, didn't	
Arab journalists to follow COVID-19-related topics as part of	use	
your work?		
Q4: Which of the listed COVID-19-related topics did you	Choose all that apply form a	
follow on social media as part of your work?	list of 20 items.	

#### The interview

News workers (e.g., journalists, managing editors, reporters, etc.) are excellent candidates for interviews, as the nature of their work means they can communicate their experiences in especially accessible and reflective ways (Lindlof and Taylor, 2002). The existing research on journalists' experiences with social media use during COVID-19 has therefore relied on the interview method (Perreault and Perreault, 2021; Radcliffe, 2021). To understand their experience and challenges that they faced when using social media during COVID-19, we further anonymously conducted 19 interviews with participants from 10 Arab countries. Note that due to lockdown restrictions, we were only able to interview few journalists per country, however, diversity perspectives were our focus. In terms of nationality, they were from Algeria (1), Bahrain (2), Egypt (3), Iraq (1), Libya (4), Mauritania (1), Morocco (1), Sudan (1), Syria (1), and Tunisia (4).

All participants, except one (P14 who is a journalist and a TV producer), currently work for either an online or a print newspaper. Two of the participants are editors (P9 and P16), while the rest are reporters. Seven participants have 10-20 years working experience, while both six have less than 10 years or over 20 years of work experience. We obtained informed consent from all participants to analyse and report their anonymised responses. We used a convenience sampling strategy and sampled participants who are 'convenient' sources of data in terms of their accessibility through our professional networks (Battaglia, 2008). All participants were recruited through the professional contact list of one of the authors who also conducted the interviews in Arabic almost a year after the survey was conducted (September and December 2021.

We used video call with interviewees, and particularly WhatsApp and email interviews (Ndlovu and Sibanda, 2022). Ten of the interviews were conducted through WhatsApp and nine

were conducted by email to accommodate for the participants' busy schedules (for email interviewing see e.g., Burns, 2010; Fritz and Vandermause, 2018), but also to overcome Internet connectivity and data costs associated with WhatsApp video and voice calling. All WhatsApp interviews were synchronous voice interviews (we did not use voice notes) and lasted 30-45 minutes. Email interviews were 2,164-words-long on average. WhatsApp voice interviews were semi-structured and were roughly divided into two parts - participants were first asked general open-ended questions about their work-related social media practices followed by specific open-ended questions about the work-related challenges of using social media during the pandemic. In the email interviews, we sent participants the same questions that we asked the participants in our voice WhatsApp interviews. These were sent as an initial list, and due to the lack of synchronous interaction in email interviewing, we acknowledge that our email interviewing strategy is closer to structured interviewing than semi-structured interviewing. We followed up with our email interview participants if we felt that an issue, they had raised in their email reply needed to be explored further.

Note that due to the COVID-19 lockdown restrictions and the accompanying logistical challenges, such as limited access to reliable Internet, difficulties in coordinating interviews across multiple time zones, and the heavy workloads of journalists during the pandemic, we were constrained in the number of interviews we could conduct. We believed that many journalists were under significant pressure and facing personal and professional hardships, making it difficult to secure more participants. Despite it all, we ensured that our participants were carefully selected to represent (1) diverse perspectives from different region, (2) a range of roles and (3) media outlets.

Thematic analysis was employed to highlight the primary challenges confronted by our participants in utilising social media for their work during the COVID-19 period (van Antwerpen, Turnbull and Searston, 2022). One of the authors conducted the analysis, following the iterative process outlined in the six steps by Braun and Clarke (2006). The initial step involved familiarising with the data, including transcription. To capture broad themes, interviews were transcribed verbatim, excluding non-semantic sounds and utterances (e.g., 'umm'), as well as the occurrence and duration of pauses—common practices in studies involving close linguistic analysis (Bolden and Hepburn, 2018). Familiarisation also encompassed repeated readings of transcripts and the identification of preliminary patterns.

The second phase focused on generating initial codes through an inductive coding approach, aiming to produce a comprehensive set of codes. In the third phase, codes were organised into themes based on their similarity in propositions. The fourth phase consisted of reviewing themes to ensure accuracy and completeness in reflecting the data, with careful attention to the omission of any themes. The fifth phase involved the final naming of themes, and the ultimate sixth phase encompassed crafting a narrative for each theme. In presenting the themes, an alphabetical order was maintained (with no intention of quantification in this qualitative analysis), and representative quotes (translated into English) were used, providing a glimpse without exhausting the full range of quotes available.

The study obtained approval from the IRB committee of the [Blind for peer review]. Additionally, all participants (survey and interviews) were provided with a consent form and information sheet. This form, presented on the first page before the commencement of the survey, included a project summary with the researchers' contact information. Respondents were reminded that by proceeding, they expressed voluntary agreement to participate, and were informed to withdraw from the study at any point without any consequences. The data collection ensured anonymity for the responses.

The survey and interviews specifically explored the extent to which Arab journalists relied on social media as a source of information for their reporting, including the types of platforms used and the challenges encountered in verifying the information found online. Data were analysed using SPSS for the survey and thematic analysis through NVivo software. The main data are structured by presenting the survey's findings followed by the interviews.

### **Findings and Discussion**

# Social media use and preferences during only COVID-19

When reflecting on the extent of social media adaption by Arab journalists during COVID-19, most participants - accounting for 84.0% of all those surveyed, indicated that a significant portion of Arab journalists used social media as primary source of information. 10.4% said that they used social media 'sometimes' or 'rarely' (5.6%). Early research has indicated similar findings (Mansour, 2018; Richter and Kozman, 2021). It is also consistent with observations made about journalists elsewhere who have reported spending a large part of their time on social media during the pandemic (Perreault and Perreault, 2021).

Participants were also prompted to assess the frequency of their utilisation of particular social media platforms amid the COVID-19 pandemic. Our results show that WhatsApp and its parent company Facebook were the two most preferred social media platforms that were used 'daily' (see Figure 3). These results can be interpreted as positive, as research has found that Facebook and its subsidiaries, among which WhatsApp and Instagram, have acted comparatively well in removing misinformation about COVID-19, while YouTube and X have emerged as the worst social media for acting on COVID-19 misinformation (Euronews, 2021).

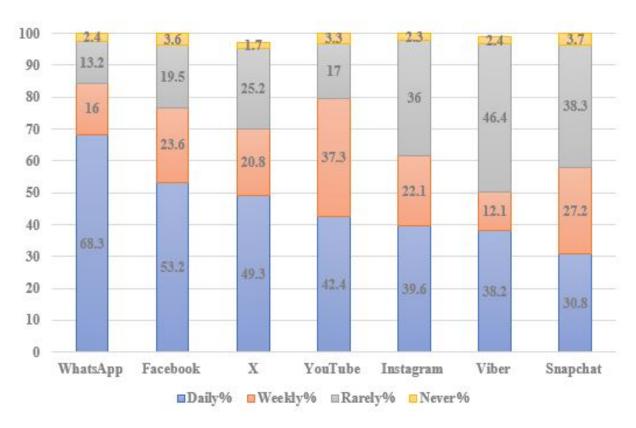


Figure 3. Rate of use of specific social media platforms by journalists during only COVID-19

# Social media adaption for COVID-19 related topics

When asked to rate their level of use of social media by Arab journalists to follow COVID-19-related topics, most of the respondents (76.0%) said that their use of social media by Arab journalists was 'high', while 17.0% answered that their use was 'average', or 'low' (6.0%), and only 3.0% said they 'never' used it to do so (Mansour, 2018). Table 2 presents the specific topics related to COVID-19 followed by Arab journalists on social media. The top uses of social media by journalists for specific topics related to COVID-19 revealed a mix of information, suggesting

that participants primarily used social media to follow rapidly developing topics as mentioned in Table 2. These topics were particularly relevant in the early stages of COVID-19 when official information was limited, and journalists needed immediate updates. As such, social media became a critical platform for tracking real-time developments, allowing journalists to quick report on news restrictions or health guidelines.

**Table 2.** COVID-19-related topics followed by journalists on social media (N = 1443)

COVID-19-related topic	% saying 'very	Mean	SD
	important'		
- Approaches to averting COVID-19 transmission	67.2	2.63	.573
- Rates of domestic violence during lockdown	63.4	2.59	.567
- Humorous content about lockdown life	59.1	2.52	.625
- COVID-19 deaths worldwide	57.2	2.43	.721
- Predictions about COVID-19 spread	56.9	2.48	.648
- COVID-19 rates worldwide	56.8	2.48	.651
- Vaccinations and their availability	55.5	2.33	.729
- International press conferences	54.7	2.41	.713
- Causes of the spread of COVID-19	53.5	2.44	.665
- National press conferences	51.2	2.35	.742
- COVID-19 symptoms	50.1	2.40	.659
- Salary and health-insurance issues	43.0	2.25	.735
- Food-supply issues during lockdown	42.0	2.16	.807
- COVID-19 deaths nationally	32.7	2.12	.723

The topic most followed by COVID-19 related on social media was 'methods to prevent COVID-19 infection'. News stories that provide truthful, fact-checked information about the prevention of COVID-19 can be lifesaving. As the famous proverb goes, 'prevention is better than cure', and therefore, it can be seen as an overall positive finding that Arab journalists used social media primarily to follow developments on COVID-19 prevention.

The COVID-19 pandemic brought attention to and exacerbated another pandemic, that of violence against women and girls, with various studies reporting an increase in rates of violence compared to pre-lockdown times both within the Arab world (El-Nimr *et al.*, 2021; UN Women, 2022) and outside (Mittal and Singh, 2020; Panovska-Griffiths *et al.*, 2022). Under the label 'The Shadow Pandemic', the United Nations (UN) launched a campaign to raise awareness of the global increase in 'domestic violence against women and girls' amid COVID-19 (UN Women, 2022; DeShong, 2023). Thus, it is perhaps unsurprising that the topic of 'rates of domestic violence during lockdown' emerged as the second most followed topic by Arab journalists on social media. It also suggests that journalists were acutely aware of and engaged in this issue.

The third most followed COVID-19-related topic was 'humorous content about lockdown life'. In fact, several hot satirical takes on COVID-19 emerged in most Arab region, including a TV Show starring the pandemic as the guest of honour and a parody COVID-19 X account (France24, 2020). Much has been written about the role of humour as a coping strategy in difficult and tragic times, including during COVID (Amici, 2020; Myrick, Nabi and Eng, 2021). Viewing humorous COVID-19 content has been found to increase the general population's confidence in their ability to deal with the pandemic, help them distance themselves from the negative events surrounding the pandemic and keep perspective, deal with the seriousness of the situation, and make the daily life of lockdown life more bearable (Amici, 2020; Cancelas-Ouviña, 2021; Myrick, Nabi and Eng, 2021). The popularity of this topic suggests that Arab journalists are no exception to the general population and searched for humorous content as a coping strategy.

# Challenges associated with social media use during only COVID-19

Overall, Arab news workers interviewed indicated that the important of social media in their work that was increased during COVID-19. Note that most leading news organisations in the Arab world (e.g., *Al-Jazeera*, *Al-Arabiya*, *Arab News*) have established and developed robust social media presences, highlighting the growing significance of these platforms in journalism practices. It became clear that this adaption should continue as integral part of journalistic work, saying P17:

Social media became an integral part of journalistic work and its practice, and a necessity and cannot be abandoned.

### As P18 and P11 mentioned in their interview:

The lockdown completely changed how we worked. Suddenly, we had to find ways to do everything digitally, but our internet connection was often unreliable, which caused delays in reporting.

### P5 followed up by saying:

When the pandemic is over, the journalist should try to continue to use the skills of using social media acquired during the pandemic and continue to employ them in post-pandemic work practices.

This explains the strong link between social media adaption and journalistic work as it become their go-to source for breaking news updates, especially since traditional press briefings

were cancelled during the pandemic. Journalists used these platforms not only to monitor official updates, but also to gauge public sentiment and track misinformation as P2 and P7 further explained:

During the pandemic, the practice of journalistic work changed very dramatically, and social media became the actual field in which a journalist carried out his daily work'.

#### P9 and P3 both mentioned:

During COVID-19 journalists discovered that social media offers the opportunity to increase productivity and efficiency by communicating with more than one source at the same time using various social media platforms.

## P1 stated that:

Most of the stories I wrote using social media sources were short news updates on new COVID-19 measures or infection rates.

Furthermore, two main themes also emerged from the thematic analysis of the interviews relating to the challenges of using social media during COVID-19: the complicated relationship between social media and media freedom and the extent of misinformation on social media.

### The complicated relationship between social media and media freedom

News workers spoke of a vicious circle in which laws introduced by many Arab governments as a purported measure to curb COVID-19 disinformation / misinformation resulted in a decline of press freedom; but also, further increased social media as a source of news and communication, which, in turn, meant additional restrictions on social media use. P15 said:

The censorship of media and social media communication increased during COVID-19, resulting in judicial cases against journalists and those with critical opinions.

P6 talked about how Arab governments use social media to track and monitor journalists' online activities:

During COVID-19 social media were used to monitor journalists and present evidence against them in courts.

The negative impact of COVID-19 on media freedom has been significant, as revealed by the International Press Institute (IPI) (Trifonova Price and Antonova, 2024), which had already recorded more than 130 cases of media freedom violations throughout the world as of April 2020 (Bentzen, 2020). While China and Russia have received the greatest attention in relation to suppression of media freedom in response to the pandemic, many Arab countries also experienced heavy censorship of news about COVID-19 (e.g., Bahrain, Egypt, Iran, Iraq, Libya, Saudi Arabia) (Bentzen, 2020). Even a country like Lebanon, known for its comparatively free media, found itself on the slide in 2020 as reporters faced increasing attacks from police over their COVID-19-related reporting (ICIJ, 2021). P12 and P19 added:

Arab journalists are currently and will continue to suffer in the future from the restrictions on press freedom introduced in the wake of COVID-19, forcing them to rely on social media as an open source of information, and given their importance, the authorities will continue to seek further restrictions on social media by blocking more websites and pages.

Overall, the concerns about social media use and media freedom expressed by our participants corroborate a rather grim outlook of steadily decreasing media freedoms in the Arab world described by others (Pintak, 2022). As award-winning journalist and former CBS News Middle East correspondent Lawrence Pintak (2022) wrote, COVID-19 provided a pretext for Arab governments to crack down on media freedom by allowing them to label as 'misinformation' anything they did not want revealed about the pandemic, which is further contributing to 'journalism' Arab Spring [being replaced] by a cold, dark winter' (p. 1264).

# The extent of misinformation on social media

News workers spoke not only of how 'misinformation' was used as a discourse strategy to legitimate restrictions on media freedom, but a tactic also used by former US president Donald Trump to attack and discredit the news media and political rivals, which has since been reproduced by politicians in other national contexts (Farhall *et al.*, 2019). As P10 and P14 said:

Many bloggers and creators of online content with unethical behaviour provided many false and fraudulent information, which made the work of journalists very difficult.

They were also concerned about the degree to which misinformation was, indeed, present on social media, the difficulties in verifying misinformation, and how this all made their work more difficult. While P4 and P8 said:

Most journalists have no doubt developed their own methods and ways of dealing with social media and their fake news.

#### P9 added:

What made the situation worse was my inability as a journalist to obtain confirmed information about what was published on social media.

A particular challenge was, as P16 and P13 expressed:

Obtaining fast, exclusive and comprehensive news with many details, while at the same time making sure it is correct as soon as possible.

Misinformation on social media has been identified as a serious issue both in the context of previous health crises (AlAashry, 2022; Ejaz, Ittefaq and Arif, 2022) and in relation to health topics more broadly (Suarez-Lledo and Alvarez-Galvez, 2021). The concerns about misinformation on social media platforms expressed by the Arab news workers interviewed echo reports by the COVID-19 Infodemics Observatory which identified over a million posts circulated on X with inaccurate, unreliable, or misleading information related to the pandemic as of only September 2020 (United Nations, 2022). It is also consistent with findings from other existing research on the main sources of COVID-19 misinformation that point to the various social media platforms as a key source (Naeem and Bhatti, 2020; Naeem, Bhatti and Khan, 2021). Misinformation on social media become consistently identified as a key challenge for news workers from various other parts of the world (Perreault and Perreault, 2021; Radcliffe, 2021), and it is unsurprising that Arab journalists are no exception. Although the interviewed news workers were generally confident in their own and their colleagues' fact-checking practices, the widespread nature of misinformation and the threat it poses underscores the continued importance of training news workers on how to recognise and stop misinformation (CFI, 2020; UNDP, 2021; see e.g., Arab Reporters for Investigative Journalism, 2022) and to translate and make available key verification resources (Silverman, 2014).

#### Conclusion

Although the utilisation of social media by Arab journalists has been investigated concerning political crises, there is dearth research examining social media adaption by Arab journalists in the context of health crises, COVID-19 outbreak. This study makes an important contribution by exploring Arab news workers' use of social media during the early pandemic through a combination of (a) a large-scale self-completion online survey with 1,443 journalists from 19 Arab countries and (b) interviews with 19 news workers (journalists and editors) representing 10 Arab countries.

We found that, much like other journalists around the world (Perreault and Perreault, 2021; Radcliffe, 2021; Ndlovu and Sibanda, 2022), Arab journalists relied heavily on social media during the early COVID-19 both overall and for information on COVID-19-related topics. Platforms, Facebook and WhatsApp, have done comparatively better in terms of dealing with COVID-19-related misinformation - were the most popular social media platforms checked daily. This can be interpreted as an overall positive practice. Journalists used social media both for as source of information on serious topics (including prevention strategies and domestic violence during lockdown) and to cope with the pandemic (by viewing humorous COVID-19-related content), which is also consistent with people's behaviour reported in other crises (Amici, 2020; Myrick, Nabi and Eng, 2021).

In interviews, Arab news workers (journalists and editors) highlighted two main challenges of using social networks during early COVID-19. The theme of 'the complicated relationship between social media and media freedom' underlines the vulnerable position of journalists in the Arab world and echoes observations that the gains made in terms of media freedom in the years leading to the Arab uprisings have been largely lost as governments have used COVID-19 as an opportunity to label as 'misinformation' (social media) content that does not suit government discourse (Pintak, 2022). The theme around 'the extent of misinformation on social media' has emerged as a key concern and challenge for journalists from various other parts of the world (Perreault and Perreault, 2021; Radcliffe, 2021; Ndlovu and Sibanda, 2022), and it emphasises the importance of continuing to provide training to news workers in the Arab region on how to detect and deal with misinformation (CFI, 2020; Arab Reporters for Investigative Journalism, 2022) and to translate and make available key verification resources (Silverman, 2014).

More importantly, the pandemic highlighted the growing importance of social media as critical source of information for journalists. Our study, clearly, shows that Arab journalists, much like their global counterparts, relied heavily on social media to access timely information during COVID-19. This shift towards digital information sourcing highlights a broader tends in journalism, where social media become not only channels for distribution, but also indispensable sources of news and data (Broniatowski *et al.*, 2022).

Findings from the present study enable us to better understand the main challenges that Arab news workers face when working in crisis situations, health crises. Our findings also contribute to the general picture of the current state of Arab journalism. The study is, however, not without limitations. We particularly acknowledge its limitations in terms of (1) the questions asked in the online questionnaire and the interviews; and (2) the interview sampling strategy. In terms of the former, while we found that issues of misinformation emerged as a key challenge, due to limitations of time and resources, we did not explore what practices and/or apps journalists adopted to fact check social media content. This also points to an important direction for future research. In terms of the latter, we used an interview sampling strategy that relied on the convenience of having easy access to the participants. Although convenience sampling is affordable, quick and widely used, it is also somewhat 'accidental', as participants are selected just because they are close to the researchers (e.g., geographically, professionally). Future research might adopt a purpose sampling strategy in which news workers are approached not because they meet certain practical criteria, but because of the qualities they possess (e.g., being known to be especially actively reporting on COVID-19).

Despite its limitations, our research serves as an underpinning work for a further comparative exploration of the impact of COVID-19 on journalists in countries with instable political situation. For example, Arab journalists faced increased pressure and censorship from their governments, especially when it comes to media freedom and public dialogue. As a result, our research has embarked to map out how Arab journalists overcome the information challenges during COVID-19 by using social media platforms highlighting 'the relationship between social media and media freedom' and 'the extent of misinformation on social media'.

# **Funding**

None.

### **Declaration of interest**

The authors report there are no competing interests to declare.

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