# Hospitals' Corporate Communication Initiatives during the Covid-19 Outbreak: Experiences, Challenges and Future Opportunities

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## Abstract

The COVID-19 pandemic led hospitals to work differently regarding legal procedures and eHealth services and brought a changing and fluctuating healthcare environment that affected communication among clinicians, patients, and families.  These organizations were forced to make their corporate communication initiatives more efficient and interact with stakeholders differently, especially with patients and media companies. This paper aims to understand better hospitals' main corporate communication initiatives during the Covid-19 pandemic. We show that the most important communication initiatives implemented by hospitals during the COVID-19 outbreak were related to the following main areas: a) professional management of corporate communication, b) transparency, c) human values, d) hospital's brand, and e) online corporate communication. During the pandemic, there was a lack of professional corporate communication in hospitals and the need to execute more than merely conservative communication strategies. There is a solid need to make hospitals' corporate communication initiatives more professional.

Keywords: Hospitals, Corporate communication, Stakeholders, Brand, Covid-19

## Introduction

The COVID-19 pandemic brought a changing and fluctuating healthcare environment that affected communication among clinicians, patients, and families. Hospitals conduct their activities in constantly evolving frameworks, forcing these organizations to change their internal procedures, adapt their protocols, integrate patients' new needs, and implement new business models based, among others, on artificial intelligence and big data (Wittenberg *et al.*, 2021). On the other hand, several hospital-based clinicians and patients have become opinion leaders whose actions and attitudes impact stakeholders' perceptions of these organizations (Mheidly & Fares, 2020). Promoting corporate communication has become an essential initiative in this framework to help hospitals adapt to internal and external challenges. One of the main

challenges is crisis communication, as was the case during the Covid-19 outbreak. This pandemic resulted in millions of deaths globally, but it also damaged many hospital's credibility. When hospitals face this kind of crisis, they need to implement professional corporate communication practices to protect the organization's legitimacy (EACD, 2021; UN, 2020; WHO, 2015).

During these last years, exploring how the COVID-19 pandemic changed hospitals' internal and external processes has become a key research topic: legal procedures, eHealth services, etc. However, few studies have been conducted about how these organizations managed corporate communication to face this crisis. During Covid-19, hospitals all over the world faced different challenges related to corporate communication (Back *et al.*, 2020), fake news and employees' information needs (Fernández Zarza, 2022), interpersonal communication among patients and doctors (Back *et al.*, 2020), the use of social media and websites as source of scientific information (Król & Zdonek, 2021; Medina Aguerrebere *et al.*, 2022), or the impact of online information on patient's satisfaction from an emotional perspective (Dextre-Vilchez *et al.*, 2022).

In this framework, this paper aims to answer three main research questions: 1) What were the main corporate communication initiatives implemented by hospitals during COVID-19? 2) How did researchers analyze these initiatives from a scientific perspective? and 3) What was the communication research focus of COVID-19 in hospitals' structures? In other words, this paper aims to provide solid recommendations on how healthcare organizations should manage corporate communication during crises. This area is important because, on the one hand,  healthcare organizations face many problems when establishing good relationships with stakeholders; and on the other hand, these institutions need practical recommendations to adapt their corporate communication strategies constantly. Both reasons justify the interest in conducting a literature review about this area. Even if some authors have published papers about clinicians' communication relations during the COVID-19 pandemic (Wittenberg *et al.*, 2021), there is a lack of studies focusing on how these organizations managed corporate communication from a strategic perspective. To overcome this challenge, we conducted a literature review about corporate communication in hospitals, social media platforms, and crises. Then, we analyzed the papers published in *Scopus* and *Pubmed* from January 2020 to December 2022 that focused on hospitals' crisis communication strategies during the Covid-19 outbreak. Finally, based on our analysis, we identified five main themes, proposed ten practical recommendations, and suggested three conclusions for researchers and practitioners.

**Conceptual framework**

Hospitals' corporate communication initiatives during the COVID-19 outbreak played a crucial role in patients' clinical outcomes (Salman *et al.*, 2020). Every communication effort was essential to improve the hospital's efficiency from a health and social perspective.

That is why these organizations focused on online platforms, websites, and social media to communicate with employees more efficiently, disseminate accurate information to employees and relatives, and improve clinicians-patient relations inside and outside the hospital (López-Villegas *et al.*, 2021; Selman *et al.*, 2020; Villegas-Tripiana *et al.*, 2020).

*Corporate Communications in Hospitals*

The professional management of corporate communication enables doctors to improve their skills: relations with patients, health education initiatives, etc. (Brent, 2016). Thanks to corporate communication, healthcare organizations can influence stakeholders' attitudes and expectations about health, prevention, and healthcare services (Robinson *et al.*, 2014). These initiatives are essential to change people's behaviors (Nazione *et al.*, 2013) and reinforce patients' empowerment and their relations with hospitals, health authorities, and patients' associations (Moran & Sussman, 2014). Hospitals resort to three main initiatives to efficiently implement corporate communication: interpersonal, internal, and external communication (Medina-Aguerrebere *et al.*, 2020).

Hospitals resort to interpersonal communication to improve patients'-clinicians' relations and promote the organization's brand (He & Balmer, 2013). These institutions share meaningful content with patients and other stakeholders, making them unique brands (Medina-Aguerrebere *et al.*, 2020). However, before sharing this content, hospitals analyze stakeholders' perceptions, promote the organization's scientific credibility, and integrate the brand into the hospital's internal processes (Esposito, 2017; Kemp *et al.*, 2014).

Besides interpersonal communication, hospitals implement internal communication initiatives to help employees understand the main organizational goals and improve internal processes (Welch & Jackson, 2007). Thanks to internal communication, health professionals can share information among themselves (Rodrigues *et al.*, 2016), improve their relations with patients (Xie *et al.*, 2013), accelerate internal innovation processes (Pelitti, 2016), and become brand ambassadors able to influence stakeholders' perceptions about the hospital brand (Kumar *et al.*, 2014).

Finally, hospitals resort to external communication to influence some stakeholders' attitudes, such as media companies or public authorities (Moser & Freeman, 2014), but also patients: these last ones are true opinion leaders that influence the healthcare industry (Medina-Aguerrebere *et al.*, 2020). Thanks to external communication, hospitals promote values related to public health, innovation, and medical performance ((Fischer, 2014; Mira *et al.*, 2014), and manage in a more professional way different crisis, especially when it comes to dealing with media companies (Heide & Simonsson, 2014).

*Communication between hospitals and patients through social media*

Different publications have proved that clinicians struggle to establish trusting relationships with patients; in other words, hospitals need to help these professionals improve their communication skills (Banerjee *et al.*, 2016; Leung *et al.*, 2017). During the COVID-19 pandemic, these challenges became more serious: patients' isolation in hospitals made it more difficult for them to communicate with their families and doctors (Wittenberg *et al.*, 2021). According to Aboumatar (2020), establishing efficient communication channels among patients and health professionals became one of the most significant problems experienced by these institutions. Healthcare staff needed to communicate with patients and relatives about different topics: security measures, wearing of masks, vaccines, etc. (Bowman *et al.*, 2020). However,  many could not communicate efficiently because, on the one hand, hospitals implement strict protocols; and on the other hand, many had not been trained in communication skills when they were in the School of Health Sciences

(Back *et al.*, 2020). Indeed, according to Paternotte *et al.* (2015), schools of medicine should propose different courses on communication to their students: interpersonal communication, multiculturalism, linguistics, social issues related to health, etc. These skills are essential for health professionals to effectively communicate with patients and their colleagues (Hewett *et al.*, 2015). When these professionals have skills in interpersonal communication, they can influence patients' attitudes and motivations, and encourage them to participate in collective decision-making processes concerning their treatments (D'Agostino & Bylund, 2014). Thanks to communication, patients reinforce their empowerment and improve their physical and emotional health (Gilligan *et al.*, 2021). Moreover, when patients and doctors communicate efficiently, the first ones become more responsible and do not engage in risky behaviors, positively affecting doctors' reputations (Archiopoli *et al.*, 2016).

Hospitals can accelerate digital transformation by integrating social media into their corporate communication initiatives (Fischer, 2014; Haluza *et al.*, 2017). Many hospitals resort to social media platforms to improve their relations with stakeholders (Matarín Jiménez, 2015),  especially with patients: thanks to these tools, hospitals can make their relations with patients more dynamic (Lim *et al.*, 2016). Before the Covid-19 outbreak, the number of hospitals using social media platforms in Western European nations was still low compared with other industries (Costa-Sánchez & Míguez-González, 2018; Medina Aguerrebere *et al.*, 2021). Nevertheless, during the outbreak, many hospitals started investing in this area and developed their social media platforms in a more professional way (Gamonal González *et al.*, 2020; Machado *et al.*, 2020). Indeed, these platforms have become a trustworthy source of information and a way for patients and relatives to share their personal experiences. According to Dhanashrree et al. (2021), COVID-19 led patients to use social media platforms as one of the primary sources of medical information. Besides social media platforms, many hospitals have invested in telehealth services to efficiently deal with patients suffering from COVID-19. Thanks to these services, patients and clinicians can establish efficient communication channels, accelerating the digital transformation of hospitals (Bokolo Anthony Jnr., 2020). Some of the most common telehealth services implemented by these organizations were video-based consultations, considered as beneficial as in-person consultations (Barnett *et al.*, 2021; López-Villegas *et al.*, 2016, 2021). Hospitals resort to these technologies to accelerate their digital transformation; however, these initiatives should be consistent with patients' information and emotional support needs. Some patients react negatively when using these technological tools, which can provoke different problems within healthcare settings (Catalan-Matamoros *et al.*, 2019, 2020; Cerdan *et al.*, 2017). That is why hospitals should not focus exclusively on managerial, economic, and technological aspects: they must always consider patients' needs and rights (Bokolo Anthony Jnr., 2020).

**Methodology**

We followed a methodological approach to identifying scientific papers from keyword searches. From 21st January to 13th February 2023, we conducted a quantitative review whose main objective was to retrieve scientific papers focusing on how hospitals managed corporate communication during the COVID-19 outbreak. Two independent researchers led this analysis to ensure that no studies were unexamined. Both

resorted to two prominent academic research databases: *Scopus* and *Pubmed*. In each platform, they searched for papers published in English between 1st January 2020 and 31st December 2022 to cover the period since the pandemic was declared (January 2020) until the number of cases drastically decreased in all countries (December 2022). These researchers searched for papers that included on their titles and/or abstracts one or several of the following keywords: hospital, communication, COVID-19. The search retrieved 2.490 papers in *Scopus* and 5.044 in *Pubmed*.

After this initial search, the same researchers carefully screened the literature results. To do that, they read each paper's title, keywords, and abstracts. Based on that, they excluded papers that did not meet the focus of this research. Following this process, these researchers retrieved 254 papers that directly and indirectly referenced hospitals' corporate communication initiatives during COVID-19. Then, following this preliminary exclusion process, all remaining full texts were further screened by the same researchers to identify research that directly focused on our three research questions; any discrepancies found were resolved through mutual agreement, and when it was not achieved, a third researcher was consulted. This analysis allowed us to retrieve 35 papers on hospitals' corporate communication initiatives during COVID-19. Finally, we defined three inclusion and three exclusion criteria to ensure all papers selected helped answer our research questions (see *Table 1*). We finally identified eight scientific publications after evaluating these 35 papers according to our six inclusion and exclusion criteria (see *Table 2*).

Three authors independently read and assessed these eight papers to confirm eligibility using the Critical Appraisal Skills Program (2013). This 10-question checklist is commonly used in health-related qualitative evidence syntheses studies and allows researchers to use an evidence-based approach to assess the methodological quality of studies. Some of the criteria included are the following: clarity of the research aims, appropriate use of methodology, relevance of data collected, and significance of the finding in the ability to address the research questions (Long et al., 2020). Based on these analyses, we designed a methodology to evaluate these eight papers and answer our three research questions. This methodology consisted of identifying each paper, including its authors, date of publication, country analyzed, title, journal, pages, and central themes considered.

Table 1. Inclusion and exclusion criteria

| Inclusion criteria | Exclusion criteria |
|---|---|
| 1) Main topic: hospitals' corporate communication initiatives. | 1) Descriptive papers mainly based on qualitative information. |
| 2) IMRaD structure: introduction, methods, results, discussion. | 2) Papers focused on medical technology. |
| 3) List of scientific references at the end of the publication. | 3) Short communications including less than 2.000 words. |

Source: the authors

Table 2. Papers Screening

| Criteria | *Scopus* | *Pubmed* |
|---|---|---|
| Papers retrieved after using our keywords | 2.490 | 5.044 |
| Papers directly or indirectly related to the three research questions (RQ) | 65 | 189 |
| Papers directly related to the 3 RQ | 7 | 28 |
| Papers directly related to the 3 RQ that met all inclusion and exclusion criteria | 2 | 6 |
| Total papers considered | 8 | |

Source: the authors

**Results**

Covid-19 forced many hospitals to modify their corporate communication initiatives: patients, media companies, and public authorities required these organizations to be transparent and share different information about the impact of this outbreak, the prevention measures, and the emotional support proposed to patients and their relatives. After we analyzed papers available in *Scopus* and *Pubmed* that evaluated these hospitals' corporate communication initiatives during the COVID-19 pandemic, we could identify some of the main themes these organizations considered when implementing corporate communication initiatives to face this crisis. To do that, we identified the main themes analyzed in each paper, and then we found different synergies among them to narrow the following list, including five main topics: 1) professional management of corporate communication, 2) corporate communication and transparency, 3) corporate communication and human values, 4) hospital's brand, and 5) online corporate communication initiatives (see *table 3* below). These five themes highlight some essential challenges these organizations should consider in the following years to redefine their corporate communication strategies and interact with stakeholders more efficiently.

Table 3. Main themes

| Authors<br>Date of publication<br>Country analyzed | Title of article<br>Journal<br>Volume (Issue), pages | Main themes |
|---|---|---|
| **Article 1** | | |
| Christensen, April; Havyer, Rachel; Lorenz, Amanda; Alli, Adebisi; Kilpatrick, Molly; Feely, Molly; Carey, Elise | COVID-19 communication resources in a major health system: development and dissemination | Theme 1: professional management of corporate communication |
| 2022 | BMJ Support Palliative Care | Theme 2: corporate communication and transparency |
| United States | 004024 | Theme 3: hospital's brand |
| **Article 2** | | |
| Woolford, Megan: Todd, James | Improving communication at NHS Nightingale Hospital North West: Medical<br>updates to next of kin | Theme 1: professional management of corporate communication |
| 2022 | International Journal of Risk & Safety in Medicine | Theme 2: corporate communication and transparency |
| United Kingdom | 33 (S1), S111–S115 | |
| **Article 3** | | |
| Hilde Berg, Siv; Shortt, Marie Therese; Røislien, Jo; Lungu, Daniel; Thune, Henriette; Wiig, Siri | Key topics in pandemic health risk communication: A qualitative study of expert opinions and knowledge | Theme 1: corporate communication and human values |
| 2022 | PloS ONE | Theme 2: hospital's brand |
| Norway | 17(9), e0275316 | |
| **Article 4** | | |
| Sangal, Rohit; Bray, Alexandra; Reid, Eleanor; Ulrich, Andrew; Liebhardt, Beth; Venkatesh, Arjun; King, Marissa | Leadership communication, stress, and burnout among frontline emergency<br>department staff amid the COVID-19 pandemic: A mixed methods approach | Theme 1: corporate communication and transparency |
| 2021 | Healthcare | Theme 2: hospital's brand |
| United States | 100577 | Theme 3: online corporate communication initiatives |
| **Article 5** | | |
| Schiavone, Beniamino: Vitale, Andrea: Gallo, Mena: Russo, Gianlucasalvatore; Ponticelli, Domenico; Borrelli, Mario | Overview of Facebook use by hospitals in Italy: a nationwide survey during the COVID-19 emergency | Theme 1: professional management of corporate communication |
| 2021 | International Journal of Environmental Research and Public Health | Theme 2: online corporate communication initiatives |

| Italy | 18 (14), 7225 | |
|---|---|---|
| **Article 6** | | |
| Carletto, Sara; Corezzi, Michele; Furmenti, Maria; Olivero, Elena; Rapicavoli, Paola; Rossello, Paola; Stanizzo, Maria Rosa; Bovero, Andrea | Interprofessional communication team for caregivers of patients hospitalized in the COVID-19 wards: results from an Italian experience | Theme 1: professional management of corporate communication |
| 2021 | Frontiers in Medicine | Theme 2: corporate communication and human values |
| Italy | 8, 621725 | |
| **Article 7** | | |
| Lord, Heidi; Loveday, Clare; Moxham, Lorna; Fernandez, Ritin | Effective communication is key to intensive care nurses' willingness to provide nursing care amidst the COVID-19 pandemic | Theme 1: professional management of corporate communication |
| 2021 | Intensive & Critical Care Nursing | Theme 2: corporate communication and transparency |
| Australia | 62, 102946 | Theme 3: corporate communication and human values |
| **Article 8** | | |
| Tejedor, Santiago: Pérez-Escoda, Ana; Ventín, Augusto: Tusa, Fernanda; Martínez, Fátima | Tracking Websites' digital communication strategies in Latin American hospitals during the COVID-19 pandemic | Theme 1: hospital's brand |
| 2020 | International Journal of Environmental Research and Public Health | Theme 2: online corporate communication initiatives |
| Latin America | 17 (23), 9145 | |

Elaboration: authors

*Professional management of corporate communication*.

The COVID-19 outbreak led hospitals to change their internal protocols and work differently. This crisis also forced these organizations to make their corporate communication initiatives more professional. Hospitals should consider COVID-19 as a starting point to revamp their corporate communication models and develop this area more professionally in the coming years (Carletto *et al.*, 2021). To do that, these organizations need to implement a corporate communication department where specialists having different professional backgrounds develop integrated communication initiatives (Christensen *et al.*, 2022) that are consistent with stakeholders' perceptions of the hospital (Lord *et al.*, 2021) and that contribute to improving the hospital's internal functioning and economic results (Woolford, Todd, 2022). In other words, this department should focus on defining efficient communication strategies rather than developing final products, such as magazines or brochures (Schiavone, 2021).

*Corporate communication and transparency*.

When hospitals implement corporate communication initiatives, they must respect transparency as one of the main guiding principles. Four reasons led us to confirm that. First, during the COVID-19 pandemic, healthcare professionals who felt they experienced a higher level of communication from the organization were more willing to provide patient care (Lord *et al.*, 2021). Second, sharing practical, clinically based information with employees improved hospitals' internal functionings during this pandemic and patients' clinical outcomes (Christensen *et al.*, 2022). Third, when hospitals communicate transparently with their stakeholders (impact of covid 19, treatments, etc.), these organizations could improve their credibility (Woolford, Todd, 2022). Finally, respecting transparency helped hospitals reinforce their leadership as critical players during public health emergencies (Sangal *et al.*, 2021).

*Corporate communication and human values*. Promoting human values in healthcare organizations has become a common practice: however, some hospitals' employees face inhumane working conditions, as was the case during the Covid-19 emergency (Carletto *et al.*, 2021). To avoid that, hospitals need to implement new policies that protect employees' rights (Lord *et al.*, 2021). When hospitals respect human values, such as honesty, compassion, or kindness, they become more credible organizations, making their communication initiatives more efficient (Carletto *et al.*, 2021). Promoting these values is essential to developing a collective moral of responsibility: that is why, during the COVID-19 crisis, many public hospitals in Norway implemented communication campaigns to appeal to people's sense of solidarity (Hilde Berg, 2022). For the same reason, in the United Kingdom, many hospitals focus their communication initiatives on patients' relatives and try to satisfy their needs from medical, emotional, and social perspectives (Woodford, Todd, 2022).

*Hospital's brand*.

Every communication initiative hospitals implement must align with the corporate brand (Christensen *et al.*, 2022). During the COVID-19 pandemic, some hospitals analyzed their stakeholders' perceptions, especially patients, to better adapt their crisis communication initiatives to the hospital's brand (Sangal *et al.*, 2021). To efficiently implement branding initiatives, these organizations should respect three main principles. First, defining corporate communication strategies -brand positionings, objectives, and targets- that reinforce the organization's role as a source of scientific information (Hilde Berg, 2022). Second, prioritizing digital tools, such as websites, social media platforms, and mobile apps, to disseminate meaningful content, allowing stakeholders to understand better the hospital's brand (Tejedor *et al.*, 2020). Third, integrating cultural elements - history, social issues, and ideologies- helps hospitals collectively build their brand with their stakeholders (Hilde Berg, 2022).

*Online corporate communication initiatives*.

During the Covid-19 pandemic, thousands of patients, journalists, and citizens contacted hospitals for different reasons. However, many hospitals did not manage these relationships professionally, which provoked several problems (Tejedor *et al.*, 2020). This crisis should help hospitals understand that they must invest in corporate communication and, more precisely, in online corporate communication tools. These organizations should implement a Social Media Unit that disseminates useful, updated, and scientifically

accredited information about healthcare (Schiavone, 2021). The Social Media Unit must also help hospitals develop communication initiatives that, on the one hand, reinforce patients' skills in health education and, on the other hand, improve employees' abilities in online communication (Tejedor *et al.*, 2020). During the COVID-19 pandemic, many hospitals in the United States created private groups on social media platforms to train employees on adapting therapeutic protocols to efficiently face emergencies provoked by COVID-19 (Sangal, 2021). Besides employees and patients, hospitals must use social media platforms to interact with patients' relatives, as was the case in many hospitals in Italy during the COVID-19 pandemic: they implemented online meetings to address the needs of patients' relatives (Schiavone, 2021).

**Discussion**

Our study shows how the *professional management of corporate communication* was one of the most common themes analyzed during the COVID-19 outbreak. With these regards, hospitals need to recruit experts in this area, create in-house departments, define annual communication plans to improve their relations with stakeholders, and establish tangible objectives and indicators to evaluate these plans (Carletto *et al.* , 2021; Christensen *et al.* , 2022; Woolford, Todd, 2022; Schiavone, 2021). However, most papers considered in our analysis did not analyze hospital employees' barriers to communicating with patients: lack of time and skills, the psychological impact of the outbreak, new protocols, etc.

Concerning *corporate communication and transparency*, different authors, such as Sangal *et al.* (2021), analyzed the impact of communication on hospitals' internal processes. However, no author focused on leadership as a management skill that doctors and nurses should develop and integrate into their professional practices. As to *human values*, our results demonstrated that authors analyzed several issues, such as how these values helped doctors and nurses improve their relations with patients and relatives (Carletto *et al.* , 2021; Lord *et al.* , 2021; Woodford, Todd, 2022), but they did not consider the psychological impact of the crisis in employees' performance from a communication and medical perspective.

Concerning the *hospital's brand*, reinforcing this aspect was considered a strategic priority (Sangal et al. , 2021; Hilde Berg, 2022), which involves implementing professional corporate communication practices (Christensen *et al.* , 2022b). Nevertheless, we did not find any paper focused on these aspects, especially how hospitals could use social media and mobile apps to promote the brand more professionally. Finally, concerning *online corporate communication initiatives*, several authors analyzed how hospitals used websites to reduce uncertainty (Tejedor *et al.*, 2020), and promote the hospital's brand (Sangal, 2021; Schiavone, 2021), but no study proposed key performance indicators to evaluate the impact of these decisions.

Based on our analysis, we recommend hospitals implement ten communication initiatives that allow them to manage crisis communication more professionally:

1.  Promote an integrated communication approach to collectively build the brand with the hospital's stakeholders (Kwok, Lee & Han; 2022).
2.  Analyze the psychological impact of the crisis on employees' capabilities and integrate these social issues into the hospital's internal communication strategies (Qin, Y. S., & Men, L. R., 2022).
3.  Define crisis communication plans that include practical solutions to urgent problems, such as social distancing, emotional shocks, and social impacts (Yu *et al.*, 2022).

4.  Define protocols for crises, assign roles, and design tactics to help health professionals understand how to communicate in these situations (Bobbi *et al.*, 2022).

5.  Integrate interpersonal communication initiatives into the hospital's annual communication plan so that patients and clinicians can communicate, respecting privacy and security-related issues (Zheng, Jiang & Wu, 2022).

6.  Define how hospitals integrate leadership, internal communication, and continuing education programs (Abdi, Lega Ebeid & Ravaghi, 2022).

7.  Implement communication and management initiatives to train healthcare professionals in resilience, crisis, and emergencies (Thomas & Suresh, 2023).

8.  Accelerate innovation processes and integrate ehealth services into the hospital's corporate communication plan (Su *et al.*, 2022).

9.  Manage online tools, such as social media, websites, and mobile apps, more professionally so that patients can use them to interact with doctors (Saputra, Setyoko & Kurniasih, 2022).

10. Establish corporate alliances with external stakeholders, such as vaccine manufacturers, public authorities, or patients' associations so that hospitals can share clear information with patients (Enticott, Gill, Bacon, *et al.*, 2021).

Despite our findings, we should highlight some limitations related to this paper. When defining our methodology, we focused on health communication. Still, we did not consider bibliometrics-related elements that could have been useful to accurately set our inclusion and exclusion criteria. On the other hand, we only considered papers published in English, which might prevent us from knowing how hospitals in other countries where English is not the primary language dealt with the COVID-19 outbreak from a communication perspective. Finally, the algorithm used to search papers was simple and conventional, which limited our research and results. Despite these three limitations, our research methodology helped find the most significant papers to understand how hospitals managed crisis communication during COVID-19. Finally, we recommend researchers interested in developing this area in the following years prioritize some topics, such as the quantitative impact of the information disseminated by hospitals on the organization's brand, stakeholders' reaction to the hospital's crisis communication plan (trust, perceptions, comments), the integration of new targets into the hospital's crisis communication plans (social leaders, influencers), and the impact of corporate communication initiatives during the crisis in the hospital's scientific credibility.

**Conclusion**

Managing corporate communication during crises is challenging for every organization, including hospitals. The COVID-19 pandemic led hospitals to communicate differently, establish new relations with stakeholders, and manage several technological tools, such as social media platforms, mobile apps, and eHealth services. To conclude this paper, we propose the following three highlights. *First,* most hospitals did not implement many communication initiatives in response to the COVID-19 pandemic; most resorted to internal communication and media relations but did not manage other initiatives that helped control the situation, such as press conferences with hospital CEOs, online events targeted directly to patients, or branding

campaigns aimed at the larger society, in a proper professional manner. *Second*, most authors considered in this paper analyzed hospitals' corporate communication efforts from a public health perspective and used standardized methodologies. However, no author resorted to corporate communication and branding models to explore the impact of COVID-19 on hospitals' reputations and propose recommendations to address crisis communication more professionally. T*hird*, Covid-19 affected hospitals' scientific credibility and forced these organizations to work differently, which provoked interpersonal, internal, and external communication problems. This crisis proved that many hospitals must make their corporate communication processes more professional, implement new structures, and recruit experts.

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**Data Availability Statement.** The data and codes used during the study are available from the corresponding author by request.

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