

Organisation in crisis: exploring the intensification of digital communication tools by hospital staff in a Belgian general hospital during the Covid-19 pandemic.

C.I.C. Jewell^{12*}, C. Dubois¹, F. Naedenoen² & F. Pichault².

Abstract

The complex and unprecedented circumstances caused by the COVID-19 pandemic restructured communication practices in hospitals, since the customary communication practices and channels were either inadequate or not possible to utilise. This is noticeable in the intensification of digital communication tools. The aim of this paper is to assess how communication tools and practices evolved in a Belgian general hospital during a crisis, and specifically how digital communication tools shaped the organising processes. Both quantitative and qualitative data was collected through a questionnaire (N=901), diffused to the entirety of hospital staff, and six focus groups (N=53). The findings illustrate how communicational practices happened in the pre-COVID-19 hospital context, in the COVID-19 pandemic context, and in the post COVID-19 context. This study puts forth that in times of crisis the habitual organising in the general hospital is bracketed and a new form emerges, namely that of an 'organisation in crisis'. In the general hospital, this form was constituted through the pre-existing communicational context and by a sense-making process done by managers and it was brought to life with and by digital communication tools. Nevertheless, this form is not sustained over time as it with the diminishing of the crisis so does the use of digital communication tools for organising.

Keywords

Digital communication tools, crisis, COVID-19 pandemic, CCO, sense-making, hospital staff.

¹ Centre de Recherche et d'Interventions Sociologiques (CRIS), Université de Liège

² Laboratoire d'étude sur les nouvelles technologies, l'innovation et le changement (LENTIC), Université de Liège

*Correspondence: cjewell@uliege.be

Introduction

At the start of 2020, the turmoil that the COVID-19 virus would cause was inconceivable. The new virus plunged the world into a state of uncertainty and instability in which information was being communicated constantly through numerous channels, via different media and with rapidly evolving, and sometimes conflicting, content.

In hospitals, the epicentres of the pandemic, staff found themselves dealing with continuously evolving circumstances and a constant stream of new information, measures, and procedures put forward by governments, international organisations, scientific networks and the hospitals themselves (Peiffer-Smadja et al., 2020; Robbins et al., 2020; Keniston et al., 2022). Communication is an important aspect for any organisation at the best of times, but during a crisis³ there is an increased need for information and for effective and efficient communication. However, measures taken to control infections, such as avoiding meeting in person and staff working both onsite and offsite, made the habitual and routine manner of face-to-face communication by hospital staff not possible and inadequate (Mehta et al., 2020). These situational particularities, amongst others, led to an intensification in the use of digital communication tools during the pandemic (Sniderman et al., 2022). This intensification ranges from hospitals implementing video conferencing tools, such as MS Teams or Zoom (Crosby et al., 2021; Mehta et al., 2020), to clinical groups using social media tools, such as WhatsApp or Facebook (Robbins et al., 2020).

Research has shown that the increased communication between staff and the hospital administration was received positively (Sniderman et al., 2022), even if there was a demand from hospital staff to understand the reasons behind the decision-making and to be mindful of the quantity of communication transferred (Keniston et al., 2022). Additionally, Tham et al. (2020) have shown that digital communication tools were heavily relied upon by physician leaders during the crisis as these aided with the collective sense-making and with both the strategic and operational decision-making.

³ A crisis is understood as an event that is unpredictable and has the potential to seriously affect an organisation's performance and generate negative outcomes (Coombs, 2007; 2010).

Nevertheless, there is little scientific literature that explores how communication through digital tools was established and how this practice exists over time. Amongst other topics, scientific literature focuses on the relevance of digital communication tools for public health responses to COVID-19 (Budd et al., 2020; Fagherazzi et al., 2020), which digital innovations and communication tools have been implemented as a response to COVID-19 (Clement et al., 2021; Nagaratnam et al., 2020; Sivananthan et al., 2021; Strong et al., 2021), communication with and between healthcare workers, patients and relatives (Altschuler et al., 2021; Frydman et al., 2020; Rosenbluth et al., 2020; Schallenburger et al., 2022; Selman et al., 2020) and the socio-material dynamics of digital communication tools (Cleland et al., 2020; Mora et al., 2021).

Through an empirical approach in a general hospital in Belgium, this research analyses how communication practices of hospital staff in a general hospital happened before, during and after the crisis. Through a Communication Constitutive of Organisation (CCO) and sense-making lens, this paper assesses how communication tools and practices evolved in the general hospital during a crisis, and specifically how digital communication tools shaped the organising processes.

The aim of our study is threefold. First to account for the contextual and circumstantial factors that played a role in the intensification of digital communication tools in the hospital, taking the pre-crisis and the crisis into account. Second, to posit that a crisis allows for a revisiting of the habitual communication practises, assuming that if the adaptation of communication networks is tolerated, it remains anchored in the organisational structure and practises. For instance, the general hospital managers occupied a central role as sense makers. Third, to demonstrate that the adaptations made during the crisis do not necessarily become permanent, that change in times of crisis can be a means to an end without needing to be sustained over time.

By looking at how communication tools and practices evolved and reconstituted an organising process during the crisis, we question how the fluctuating communication tools and practices sustain organisational continuity.

Theoretical framework

The fundamental premise of the CCO perspective is that an organisation is constituted of and by communication processes, which are composed by tools and practises. In its pursuit of answering the question of 'what is an organisation?', CCO places communication at the core of what an organisation is. The organisation is an unfolding and interlocking of networks of communication processes (Taylor & Van Every, 1999). This reverses the role of communication from one where it happens in an organisation, and as merely a transfer of information, to one where it is the fundamental element that shapes the social reality (Koschmann, 2013). Thus, CCO also opposes the idea that the members of an organisation themselves constitute the organisation, but instead see how through communication processes members partake in the continuous constitution of the organisation.

Blaschke et al. (2012) elaborate on how the CCO moves beyond other theorisations that reimagine the constitutive aspect of the organisation in three ways. First, that the concept of communication encapsulates the other concepts that have been put forth, such as routine or membership, and is therefore a more basic concept. Furthermore, CCO allows for a relational ontology of organisations, it stresses that the manner in which communication constitutes the organisation cannot be seen in isolation but must be placed within the network of relations. Lastly, through communication the continuously negotiated character of meaning is emphasised and therefore gives space to capture the complexity of organising. CCO sits on the premise that what the organisation is is not a given, rather the continuation of an organisation necessitates a continuous reproduction of communication.

This contribution aims to articulate both CCO and sense-making frameworks, the latter referring to the conceptual process often used to reflect and analyse happenings in crises. "Sense-making is a way station on the road to a consensually constructed, coordinated system of action" (Taylor and Van Every, 1999). Sense-making tends to happen when a disruption is experienced between the lived reality and the expected reality or when ways of engaging become blurred. From existing frameworks people will try to find reasons that allow them to continue with their activities (Weick et al., 2005). Sense-making and CCO perspectives both posit that organising is processing through communication, communication being its central component. Weick (1995)

offered seven features to serve as the guidelines to the inquiry of sense-making, namely identity, retrospection, enactment, social activity, ongoingness, cues and plausibility. Incorporating a sense-making lens provides a frame to understand how actors organise and make sense through communication in situations that are ambiguous.

Context

In 2016, three independent hospitals fused to form a hospital group. The group proposes an integrated care network in the Namur region of Belgium with three different hospital sites and 936 licensed hospital beds. In addition, hereto, the hospital is equipped with three different polyclinic sites, a palliative care facility and nursing homes and a network of early childhood centres and services. The total number of employees fluctuates around 5000.

Methodology

The study rests on an applied social research approach. The main purpose was to provide a context-specific representation of the internal communication situation as lived by the hospital staff to facilitate a change intervention through practical and propositional knowledge generated by empirical data.

The research project was elaborated at the request of the hospital Human Resources (HR) department. The HR department wanted to better understand the problems that staff was experiencing regarding the different flows of communication in the hospital (top-down, bottom-up, lateral) and formulate strategies for improvement based on the results. The project ran from September 2019 until September 2021. However, activities were halted during the first half of 2020 due to the pandemic.

Two different methods of data collection were used namely, an online questionnaire and multiple focus groups (further detailed below), with the aim of including a wide span of hospital actors and obtaining sufficient robust and in-depth information. Through continuous interaction and collaboration with the project owners, the human resources director and the training and development manager, the study could be reassessed and adapted to improve the research process.

Online Questionnaire

The first part of our study consisted of an online questionnaire, diffused via Qualtrics, accessible via a link or a QR code. Since not all employees have an official work email address, an invitation to participate was sent by post to ensure all employees were informed and to maximise the response rate. The questionnaire was diffused from the 3rd of February till the 10th of March 2021. During this period a total of 1088 people opened the questionnaire, of which 901 responses were kept for analysis after data cleaning, tables 1 and 2 below give the social demographic information for the questionnaire.

<i>Sample (N=901)</i>	
<u><i>Gender (n=901)</i></u>	
<i>Male</i>	24,3%
<i>Female</i>	75,7%
<u><i>Age (n=896)</i></u>	
<i>Average (min - max)</i>	44 years (21-81)
<u><i>Job tenure (n=898)</i></u>	
<i>Average (min - max)</i>	15.6 years (0 - 55)
<u><i>Working arrangement (n=894)</i></u>	
<i>Full time</i>	56,8%
<i>Part time</i>	43,2%

Table 1. Sociodemographic information questionnaire

<i>Sample (N=901)</i>	
<u><i>Hierarchical level (n=883)</i></u>	
<i>Manager</i>	17.1%
<i>Employee/Worker (incl. nurses, paramedical staff)</i>	69.9%
<i>Doctors</i>	10.2%
<i>Volunteers</i>	2.8%
<u><i>Department (n=840)</i></u>	

<i>Administration & finance</i>	26%
<i>Nursing</i>	33.9%
<i>Infrastructure, logistics and purchasing</i>	8.5%
<i>Laboratory</i>	5%
<i>Medical</i>	21.7%
<i>Pharmacy</i>	3.9%
<i>Integrated health and care network</i>	1.1%
<u><i>Workplace (n=900)</i></u> ⁴	
<i>Work site 1</i>	12.7%
<i>Work site 2</i>	48.2%
<i>Work site 3</i>	31.4%
<i>Work site 4</i>	3.6%
<i>Other</i>	4.1%

Table 2. Sociodemographic information questionnaire

The questionnaire focused on internal communication practices and was divided into three different sections, namely communication during the COVID-19 pandemic, ascending communication, and descending communication in the hospital. In the initial research plan, there was no subpart on the internal communication during the pandemic but considering the situation and in deliberation with the project leader, this was added to the questionnaire. A descriptive analysis of the relevant quantitative data and a thematic analysis (Braun & Clarke, 2012) of the qualitative data were done for the purpose of this paper.

Focus Groups

Between the 29th of June and the 1st of July 2021, six focus groups were held with medical, nursing, and non-medical staff. In total 53 people participated in the focus groups (see table 3 below) that were held in the three main sites of the hospital to give all staff the possibility to attend a focus group with relative ease. The focus groups were analysed in MAXQDA using a thematic approach (Braun & Clarke, 2012).

⁴ Worksite 1 to 3 refer to the three hospitals, a multisite option was added for hospital staff that do not have a fixed place (worksite 4) and staff working in the palliative care facility, the creche or the nursing home were grouped other under the option 'Other'.

It had been decided at the beginning of the project that focus groups would be held after the analysis of the questionnaire to collect more in-depth information about specific topics of interest. The results from the questionnaire were presented to various board member meetings and with their feedback and in collaboration with the project leader the final topics for the focus groups were decided upon. The use of new communication tools during the pandemic was a stand-alone topic of discussion. In addition, the focus groups taking place shortly after the COVID-19 period meant that staff often returned to the happenings during the crisis as it was still very present.

	<i>Total (N=53)</i>
<u><i>Gender</i></u>	
<i>Male</i>	35,8%
<i>Female</i>	64,2%
<i>Age range</i>	28 – 60 years
<i>Job tenure</i>	1 – 35 years
<i>Medical staff</i>	50,9%
<i>Non-medical staff</i>	49,1%
<u><i>Workplace</i></u>	
<i>Work site 1</i>	18,9%
<i>Work site 2</i>	32,1%
<i>Work site 3</i>	22,6%
<i>Work site 4</i>	26,4%

Table 3. Sociodemographic Information Focus Groups

Findings

The happenings during the COVID-19 pandemic are intimately related to the temporality of the crisis. There is a before, during and after that delineates the communicational practices explored in this paper. As a result, the findings are structured in accordance with this temporal aspect, namely communication practices

in pre-COVID-19 hospital context, in the COVID-19 pandemic context, and in the post COVID-19 context.

The pre-COVID-19 hospital context

a) A critique of the top-down flow of communication.

The unilateral top-down flow of communication in the hospital was an issue for the hospital personnel in that they did not feel heard or taken into account by hospital management.

*« Communication is more or less non-existent; **we do not hear the voices of those at the bottom.**» (Nurse, female, 52 years old - Questionnaire)*

*“The dialogue is unidirectional, it’s only top-down, **the bottom-up message is not really heard.**” (Nurse, female, 46 years old - Questionnaire)*

« One of the big problems, we (middle management) have a privileged access to communication but imagine the frustration and complexity of the people that are even further removed from the hospital management.” (Anaesthetist, male, 54 years old – Focus group)

b) An absence of communicational uniformity across the three hospitals.

Since the fusion in the 2016, the communication approach and the tools available have not been adapted much to the changed context. Overall, staff expressed a want for better communicational integration between the three hospitals, a demand for one approach with an integrated system accessible to all members of staff across the different sites. This demand was emphasised by staff that worked in multiple sites, since working with different communication systems was tedious and time-consuming.

« Disparity between the communicational spirit of the three sites.” (Doctor, 40 years old, male - Questionnaire)

“Universal communication between all the members of the hospital group, the three sites included.” (Nurse, female, 23 years old - questionnaire)

« *A merged and clear intranet for the entire hospital.*” (Logistician, female, 49 years old – questionnaire)

c) The Use of Informal Communication Channels

A reoccurring topic in both the questionnaire and the focus groups was the use of informal communication channels to get information. Although not an uncommon practice in most organisations, the reasons given by the participants were varied. Three categories could be distinguished, the first and predominant reason was the lack of access by certain members of staff to official communication sources, for instance not having a professional email address, the second was the speed of information delivery and the third related to specific work compositions, mostly of medical staff, that varied within the hospital.

“Not all personnel have the same communicational opportunities, there are differences between the sectors.” (Logistician, female, 56 years old - Questionnaire)

“Most information is transmitted by email, but *only about a third of employees have a professional email address.*” (Nurse, female, 43 years old - Questionnaire)

“The speed of the information leaves something to be desired, it is often more quickly delivered to me via the services or social media than that it is by my manager. There is a week’s difference in time.” (Nursing administrator, female, 41 years old - Questionnaire)

“The (medical) teams are of different sizes and in different locations, *there is a lot of informal communication.*” (Doctor, male, 48 years old – Focus group)

The principal informal communication channel was called ‘radio corridor’, and it referred to the exchanges that staff had amongst themselves in the everyday moments of their workday. There are different reasons put forth for the use of ‘radio couloir’, the predominant one being the tardiness of the information delivery. The secondary reasons were that staff found the information gathered through the informal channel

reliable and more relevant. Furthermore, in some smaller medical units they depend solely on these informal channels, because there are no scheduled official meetings.

“I sometimes get the information after having already heard the news through the grapevine, it’s pretty reliable. I get the official letters ten days after I’ve heard it through the grapevine.” (Nurse, female, 34 years old – Focus group)

“The exchanges in the corridors are very rich, would it still be the case if it was more structured? The informal spaces are effective because we can discuss about subjects that are of concern.” (Head of food services, female, 46 years old – Focus group)

“We’re a very small medical team, we have no meetings. We pass each other in the corridors and discuss.” (Paediatric nurse, female, 24 years old – Focus group)

Nevertheless, the use of ‘radio corridor’ was also understood and presented as a channel that could lead to faulty information.

“The grapevine can be the source of many misunderstandings.” (Haematology nurse, female, 60 years old – Focus group)

“Radio corridor is faster, but also wrong.” (Head of midwives, female, 57 years old – Focus group)

d) A marginal use of social media for professional communication purposes.

A noteworthy aspect that emerged during the focus groups was that social media tools were, to a marginal extent, already used for professional ends. In a non-uniform manner, certain teams had already been using social media tools prior to the COVID-19 pandemic to facilitate communication within their unit.

«The tech service, we have a WhatsApp group, it’s a group created by us and for us. It’s efficient.” (Information technology officer, male, 40 years old – Focus group)

In general, the results indicate that the manner in which communication constituted the organising in the general hospital prior to the COVID-19 pandemic rested heavily on informal communication practices set up by staff. The official communication channels were both lacking in their existence, in the timely transmission and the pertinence of information. Thus, organising was primarily done via informal practices, such as radio corridor or digital communication tools.

The COVID-19 pandemic situation

a) The particular circumstances during the COVID-19 pandemic

The pandemic created a situation that was unknown, uncertain, and unstable. Information was constantly changing, and people needed to be updated constantly.

“Information changed constantly during COVID.” (Nurse, female, 43 years old – Focus group)

What is noticeable, is the discrepancy between the lived experiences of managers and of staff in the field. Both underline the difficulty of the ever-changing circumstances and the abundance of information. Nevertheless, managers express a ‘trying to manage as best as possible’ in a complex situation and a frustration with the dissatisfaction of personnel, whereas staff expresses the difficulty of the lack of information received in these circumstances.

“On the field everything stopped. Every four hours or so there was new information to deliver and that was complicated, the communication changed all the time. The people in the hospital were very worried that they didn’t receive the necessary information. It was very energy consuming, and the people weren’t satisfied, whatever we did it wasn’t enough.” (Head nurse intensive care, male, 41 years old – Focus group)

“It was difficult, there was a lot of information during the COVID period, but the info didn’t reach us.” (Nutritionist, female, 53 years old – Focus group)

- b) The increased use of social media and private emails to support operations and to circulate information.

Findings from the questionnaire indicated that a significant number of respondents (41%) used new means to communicate during the pandemic. The three most prevalent categories of communication tools used by the participants were, 1) video conferencing software, such as Teams, Zoom or Jitsi, 2) social media such as WhatsApp, Messenger, or Facebook, and 3) informative and/or educational means, such as videos and webinars. In general, the respondents of the questionnaire were quite positive of these new ways of communicating with data from the survey showing that, of the participants that had used new means of communication, 85,9% found these very effective or somewhat effective.

During the COVID-19 pandemic, did you use means of communication for your work that you had never used before? (n=899)

Yes	41%
No	59%

Table 4. Results questionnaire

How do you evaluate the effectiveness of this new means of communication? (n=368)

Very efficient	20,1%
Efficient	65,8%
Inefficient	10,6%
Very inefficient	1,9%
Not applicable	1,6%

Table 5. Results questionnaire

*“We had created a group with work friends, an official closed Facebook group. A lot of demands to join the group at the beginning of COVID, it was very difficult to manage.”
(Nurse, female, 32 years old – Focus group)*

A particularity, illustrated in the passages below, is the indication that middle managers took up a significant role in the transmission of information and in the intensification of

digital communication tools for organising. They seem to have had to make sense of the situation and take into consideration the needs and demands of their team. That regardless of transgressions to prior agreements or institutional rules, they had to adjust the communication strategies to the situation as they best saw fit in order to organise and inform. What is more, the middle managers seem to have received positive feedback from their team regarding their choices.

*“The info coming from the hospital management during the COVID crisis was slow to reach us. **It’s thanks to our direct manager and their manager that everything was put into place quickly. A big thank you to them.**” (Logistician, female, 53 years old - Questionnaire)*

*“**I had agreed on a means of communicating with my team via their private email and I was thanked for using emails to give more information during this period.**” (Head nurse of intensive care, male, 51 years old – Focus group)*

*« There was Messenger group, but when I became team leader I withdrew. I used to use emails, I would give info via mail, but **emails weren’t adequate. So I reintegrated the Messenger group and used that.** I know the girls read the messages because their bubbles go down. **I’m not allowed to communicate via this tool**, but I have to live with the times, and it’s also not allowed to communicate via private mail. I’m young and so I work with the tools of my time.” (Head nurse, female, 28 years old – Focus group)*

Communication practices during the COVID-19 crisis moved towards a more intense use of ‘unofficial’ digital communication tools to serve organisational practices. This was in response to the crisis circumstances, such as the need for a continuous information transmission, as well as the institutional context, there were no digital communication tools offered by the general hospital. Furthermore, the results indicate that the intensification of digital communication tools for organising during the crisis was accomplished by a process of sensemaking of managers in the field. The complexity and the demands of the crisis allowed managers to transgress ordinary

communicational rules, with their teams and with the organisation, and through digital communication tools organising practices were restructured.

The post COVID-19 pandemic situation

a) A return to 'normal' communication channels

An observation made during the focus groups was that the use of the digital communication channels did not outlast the crisis. There are different accounts of personnel explaining (see quotes below) that the groups created and used in the times of crisis had taken on a different purpose, an informal purpose.

*“Now the group is rather informal, **it’s more private life stuff.**” (Head nurse, female, 28 years old – Focus group)*

*“The union had created a Messenger group during COVID. **After the crisis it was all over the place, there was erroneous information, it was very very dangerous.**” (Nurse administrator, female, 57 years old – Focus group)*

*“In our service (social services) the organisation during the first wave was different, we didn’t have the Messenger group. The creation of the group met a demand, it was more a psychological need. Those that weren’t in the hospital could nevertheless follow the situation. **The group still exists, but it has totally lost its importance.** It might be an interesting tool to use in order to meet the demands of part-time staff.” (Social assistant, female, 28 years old – Focus group)*

Once the intensity of the crisis diminished, so did the use of the digital communication channels for professional purposes. Their use was no longer directly for relaying information about the situation and for organising work, but they were transformed into informal communications channels that discussed non-professional matters.

Discussion

Crises, as unpredictable events, have the potential to disrupt the embedded and the taken for granted functioning of communication which lies at the heart of organisations.

The habitual forms and the pre-existing networks of communication can, as we have seen through the COVID-19 crisis, become impracticable and inadequate. The complex system through which communication happens is halted and the members are forced to deal with new and unknown circumstances. In the case of the general hospital, the findings suggest that the organisation was allowed to exist in a different form for the duration of the crisis. As if the 'original' organisation was bracketed (Weick et al., 2005), for the duration of the crisis to be able to deal with the situation and bypass any restrictions. It had as it were become an 'organisation in crisis'.

Part of what worked towards the conception of the organisation in crisis form in the general hospital was the active role of sense-making that middle managers took on. In addition, what is noticeable is that the feedback regarding the use of digital communication tools was generally positive. This acted as countenance and reinforced the validity of the utilisation, which was a decision made knowingly in legal grey zones (e.g. privacy matters). Beyond the matter of institutional privacy, communication about health information is highly regulated in general due to its sensitive nature. It is then interesting to note that the 'normal' matters of concern and conduct were equally trumped by the crisis and bracketed for the duration of the crisis. Furthermore, the participants that had used social media tools, such as Messenger or WhatsApp, explained how the functionalities of these tools allowed them to keep team cohesion by being able to receive information together, discuss the happenings at the hospital as 'usual' and to have an outlet for their fears and frustrations. Additionally, in the focus group discussions the participants illustrated how roles relative to their team were observed and maintained. For example, in messenger chats the head nurse explained that she could verify that all team members had received and opened the message, because the bubbles with the pictures of each team member would descend. Moreover, the head nurse explained that since she had a position of authority, she could not use the messenger chat in the same manner as her team. She needed to keep a certain regard of her position, this suggests the continuation of sense-making by managers within this 'organisation in crisis'.

Nevertheless, this process of change cannot be dissociated from the context prior to the pandemic and the crisis context. The 'organisation in crisis' cannot be understood without taking the pre-existing structure, processes, and problems into account. For

instance, the absence of a centralised communication strategy or not all hospital staff having a work email address and consequently not having access to information transmitted through official channels.

On top of these factors, the particular circumstances of the crisis shouldn't be omitted either. There was an increased demand for communication, and not merely as a vector of information regarding the situation at hand, but also as a means of providing psychosocial support through the possibility of sharing between the members.

These contextual and circumstantial factors created a conflict between the need for information and the lack of tools and channels offered by the organisation to do so and makes the need for another type of materiality clear, since 'radio corridor' and the heterogeneous digital tools used as a means of communication were no longer suitable. As a result, a window of opportunity materialised in which managers had to and were to a certain extent permitted to decide how to best adapt to the situation at hand with specific communication tools and channels.

The findings imply that the pre-existing issues in the hospital meant that staff were already self-organising through different forms of unofficial communication channels in person or digitally and that these tools were also organising staff through their functionalities. Subsequently, different choices were made regarding the tool to use, which seem to be based on prior use, knowledge and/or convenience.

Finally, the findings indicate that the digital communication channels set up during the crisis did not retain their purpose at the end of the third wave when hospital staff had moved beyond a crisis mode. The situation was no longer the same at the end of the third wave with the unknowns and uncertainties of the start having diminished greatly and the restrictions being gradually lifted. The 'organisation in crisis' was no longer in effect, the bracketing of the organisation had lasted for as long as it needed to before slowly finding its way back to a more habitual functioning.

Subsequently, the findings show that the digital communication channels used were either 'abandoned', stopped, or had taken on a different purpose, a more informal purpose, outside of the professional setting. A messenger group, for instance, had been transformed into a 'regular' chat group where family events, items for sale and other private discussions were held. Participants even referred to the dangerous aspect of these communication channels, as some had done for the informal communication channel used prior to the crisis.

This is not to say that the digital tools are completely abandoned, but that the main modes of communication for organising flowed back to a version of what it had been prior to the crisis. As if the organisation that had been put into brackets for the duration of the crisis, and that within this bracketed organisation it was accepted and even required to do communication differently, but that once the crisis element had dissipated so did the brackets and tacit agreement to communicate differently.

By looking at how communication changes to suit the situation, it suggests that the 'organisation in crisis' is a particular mode, that exists within a certain situated framework and temporality. Moreover, the sudden change and need to adapt rapidly emphasises the constitutive element of communication, that in communication the organising can continue, and the organisation can exist. The structuring element of communication becomes visible, there is no rupture of communication, instead it morphs into a form in accordance with the situational reality and the social reality.

Limitations and Future Research Directions

The study is based on the data gathered in one general hospital in Belgium, therefore this paper does not pretend to be able to generalise the results found to other hospitals. Adding different cases for a comparative approach to the situation, different types of hospitals and in different countries, would be beneficial to better understand the extent to which and the reasons for communication procedures with new digital communication tools to be implemented as well as how it reshaped the organising in different contexts.

Moreover, the data from the study did not allow for a longitudinal exploration of the post-pandemic situation. Nevertheless, there is a need to understand what had become of these tools that had been used, how and for what reasons. Hence, it would be interesting to take a longitudinal approach and to explore how communication practices through a use of digital communication tools might have taken on a different shape and how these constitute the post-pandemic hospital.

Conclusion

This paper contributes to the growing body of work on the use of digital communication tools during the pandemic by taking a micro-level perspective, that of hospital staff in

a general hospital, and by exploring how communication constituted the organisation in times of crisis, looking at how digital communication tools emerged, existed, and faded away. This study puts forth that in times of crisis, communication, and by inference the organisation, takes on the form of an 'organisation in crisis'. This form is co-constructed in response to the circumstantial factors of the crisis, the pre-existing communicational situation and through the agents themselves. For instance, in the case of the general hospital, managers had a pivotal role in the reshaping of communication. Hence, the 'organisation in crisis' is unlikely to be a fixed form that can be found across all organisations.

In addition, the results from the study suggest that the 'organisation in crisis' form did not stabilise over time, that the digital communication tools have not been integrated into communication practices. The new form of the organisation came into being, through digital communication tools during the pandemic and the use of digital communication tools allowed hospital staff to overcome the certain issues caused by the pandemic. However, these new practices were not maintained beyond the exceptional circumstances and with the pandemic diminishing so did the use of these tools and the 'organisation in crisis' form.

Bibliography

- Altschuler, T., Santiago, R., & Gormley, J. (2021). Ensuring communication access for all during the COVID-19 pandemic and beyond: Supporting patients, providers, and caregivers in hospitals. *Augmentative and Alternative Communication*, 37(3), 155–167. <https://doi.org/10.1080/07434618.2021.1956584>
- Blaschke, S., Schoeneborn, D., & Seidl, D. (2012). Organizations as Networks of Communication Episodes: Turning the Network Perspective Inside Out. *Organization Studies*, 33(7), 879–906. <https://doi.org/10.1177/0170840612443459>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of*

research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological. (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>

Budd, J., Miller, B. S., Manning, E. M., Lampos, V., Zhuang, M., Edelstein, M., Rees, G., Emery, V. C., Stevens, M. M., Keegan, N., Short, M. J., Pillay, D., Manley, E., Cox, I. J., Heymann, D., Johnson, A. M., & McKendry, R. A. (2020). Digital technologies in the public-health response to COVID-19. *Nature Medicine*, 26(8), 1183–1192. <https://doi.org/10.1038/s41591-020-1011-4>

Cleland, J., Tan, E. C. P., Tham, K. Y., & Low-Beer, N. (2020). How Covid-19 opened up questions of sociomateriality in healthcare education. *Advances in Health Sciences Education*, 25(2), 479–482. <https://doi.org/10.1007/s10459-020-09968-9>

Clement, K. D., Zimmermann, E. F., Bhatt, N. R., Light, A., Gao, C., Kulkarni, M., Norris, J. M., Gallagher, K. M. J., Cambridge, W. A., Shah, T. T., Ratan, H. L., Smith, D., & Kasivisvanathan, V. (2021). Communication tools in the COVID-19 era and beyond which can optimise professional practice and patient care. *BMJ Innovations*, 7(1). <https://doi.org/10.1136/bmjinnov-2020-000465>

Coombs, W. T. (2007). Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory. *Corporate Reputation Review*, 10(3), 163–176. <https://doi.org/10.1057/palgrave.crr.1550049>

Coombs, W. T. (2010). Parameters for crisis communication. *The handbook of crisis communication*, 17-53.

Crosby, B., Hanchanale, S., Stanley, S., & Nwosu, A. C. (2021). Evaluating the use of video communication technology in a hospital specialist palliative care team

- during the COVID-19 pandemic. *AMRC Open Research*, 3, 5.
<https://doi.org/10.12688/amrcopenres.12969.1>
- Fagherazzi, G., Goetzinger, C., Rashid, M. A., Aguayo, G. A., & Huiart, L. (2020). Digital Health Strategies to Fight COVID-19 Worldwide: Challenges, Recommendations, and a Call for Papers. *Journal of Medical Internet Research*, 22(6), e19284. <https://doi.org/10.2196/19284>
- Falkheimer, J., & Heide, M. (2010). Crisis Communicators in Change: From Plans to Improvisations. In W. T. Coombs & S. J. Holladay (Eds.), *The Handbook of Crisis Communication* (pp. 511–526). Wiley-Blackwell.
<https://doi.org/10.1002/9781444314885.ch25>
- Frydman, J. L., Choi, E. W., & Lindenberger, E. C. (2020). Families of COVID-19 Patients Say Goodbye on Video: A Structured Approach to Virtual End-of-Life Conversations. *Journal of Palliative Medicine*, 23(12), 1564 – 1565.
<https://doi.org/10.1089/jpm.2020.0415>
- Keniston, A., Patel, V., McBeth, L., Bowden, K., Gallant, A., & Burden, M. (2022). The impact of surge adaptations on hospitalist care teams during the COVID-19 pandemic utilizing a rapid qualitative analysis approach. *Archives of Public Health*, 80(1), 57. <https://doi.org/10.1186/s13690-022-00804-7>
- Koschmann, M. A. (2013). The Communicative Constitution of Collective Identity in Interorganizational Collaboration. *Management Communication Quarterly*, 27(1), 61–89. <https://doi.org/10.1177/0893318912449314>
- Mehta, J., Yates, T., Smith, P., Henderson, D., Winteringham, G., & Burns, A. (2020). Rapid implementation of Microsoft Teams in response to COVID-19: One acute healthcare organisation's experience. *BMJ Health & Care Informatics*, 27(3), e100209. <https://doi.org/10.1136/bmjhci-2020-100209>

- Mora, L., Kummitha, R. K. R., & Esposito, G. (2021). Not everything is as it seems: Digital technology affordance, pandemic control, and the mediating role of sociomaterial arrangements. *Government Information Quarterly*, 38(4), 101599. <https://doi.org/10.1016/j.giq.2021.101599>
- Nagaratnam, K., Harston, G., Flossmann, E., Canavan, C., Gerald, R. C., & Edwards, C. (2020). Innovative use of artificial intelligence and digital communication in acute stroke pathway in response to COVID-19. *Future Healthcare Journal*, 7(2), 169–173. <https://doi.org/10.7861/fhj.2020-0034>
- Peiffer-Smadja, N., Lucet, J.-C., Bendjelloul, G., Bouadma, L., Gerard, S., Choquet, C., Jacques, S., Khalil, A., Maisani, P., Casalino, E., Descamps, D., Timsit, J.-F., Yazdanpanah, Y., & Lescure, F.-X. (2020). Challenges and issues about organising a hospital to respond to the COVID-19 outbreak: Experience from a French reference centre. *Clinical Microbiology and Infection*, 26(6), 669–672. <https://doi.org/10.1016/j.cmi.2020.04.002>
- Robbins, T., Hudson, S., Ray, P., Sankar, S., Patel, K., Rande, H., & Arvanitis, T. N. (2020). COVID-19: A new digital dawn? *DIGITAL HEALTH*, 6, 2055207620920083. <https://doi.org/10.1177/2055207620920083>
- Rosenbluth, G., Good, B. P., Litterer, K. P., Markle, P., Baird, J. D., Khan, A., Landrigan, C. P., Spector, N. D., & Patel, S. J. (2020). Communicating Effectively With Hospitalized Patients and Families During the COVID-19 Pandemic. *Journal of Hospital Medicine*, 15(7), 440–442. <https://doi.org/10.12788/jhm.3466>
- Schallenburger, M., Reuters, M. C., Schwartz, J., Fischer, M., Roch, C., Werner, L., Bausewein, C., Simon, S. T., van Oorschot, B., & Neukirchen, M. (2022). Inpatient generalist palliative care during the SARS-CoV-2 pandemic –

experiences, challenges and potential solutions from the perspective of health care workers. *BMC Palliative Care*, 21, 63. <https://doi.org/10.1186/s12904-022-00958-9>

Selman, L. E., Chao, D., Sowden, R., Marshall, S., Chamberlain, C., & Koffman, J. (2020). Bereavement Support on the Frontline of COVID-19: Recommendations for Hospital Clinicians. *Journal of Pain and Symptom Management*, 60(2), e81 – e86. <https://doi.org/10.1016/j.jpainsymman.2020.04.024>

Sivananthan, A., Machin, M., Zijlstra, G., Harris, A., Radhakrishnan, S. T., Crook, P., Phillips, G., Denning, M. C., Patel, N., Russell, G., Darzi, A., Kinross, J., & Brown, R. (2021). Grass-roots junior doctor communication network in response to the COVID-19 pandemic: A service evaluation. *BMJ Open Quality*, 10(2), e001247. <https://doi.org/10.1136/bmjopen-2020-001247>

Sniderman, E. R., Graetz, D. E., Agulnik, A., Ranadive, R., Vedaraju, Y., Chen, Y., Devidas, M., Chantada, G. L., Hessissen, L., Dalvi, R., Pritchard-Jones, K., Rodriguez-Galindo, C., & Moreira, D. C. (2022). Impact of the COVID-19 pandemic on pediatric oncology providers globally: A mixed-methods study. *Cancer*, 128 (7), 1493–1502. <https://doi.org/10.1002/cncr.34090>

Strong, J., Drummond, S., Hanson, J., Pole, J. D., Engstrom, T., Copeland, K., Lipman, B., & Sullivan, C. (2021). Outcomes of rapid digital transformation of large-scale communications during the COVID-19 pandemic. *Australian Health Review*, 45(6), 696. <https://doi.org/10.1071/AH21125>

Taylor, J. R., & Van Every, E. J. (1999). *The emergent organisation: Communication as its site and surface*. Routledge.

Tham, K.-Y., Lu, Q., & Teo, W. (2020). Infodemic: What physician leaders learned during the COVID-19 outbreak: a qualitative study. *BMJ Leader*, 4(4), 201–206.
<https://doi.org/10.1136/leader-2020-000288>

Weick, K. E. (1995). *Sensemaking in organizations* (Vol. 3). Sage.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the Process of Sensemaking. *Organisation Science*, 16, 14204.
<https://doi.org/10.1287/orsc.1050.0133>