

Learning, internalisation and integration of the COVID-19 pandemic in healthcare workers: A qualitative document analysis

Eva Abad-Corpa^{1,2,3}  | Manuel Rich-Ruiz^{2,3,4}  | Dolores Sánchez-López²  |
Carmen Solano Ruiz⁵  | Elvira Casado-Ramírez^{2,3}  | Beatriz Arregui-Gallego⁶  |
María Teresa Moreno-Casbas^{2,3}  | Daniel Muñoz-Jiménez^{2,7}  |
M Clara Vidal-Thomàs^{2,8,9}  | M.Consuelo Company-Sancho^{2,8,10}  |
María Isabel Orts-Cortés^{2,3,5} 

¹Biosanitary Research Institute of Murcia (IMIB), University of Murcia-Murcia Health Service, Murcia, Spain

²Nursing and Healthcare Research Unit (Investén-isciii), Institute of Health Carlos III, Madrid, Spain

³CIBER of Frailty and Healthy Ageing (CIBERFES), Institute of Health Carlos III, Madrid, Spain

⁴Maimonides Institute for Biomedical Research (IMIBIC), University of Cordoba (UCO), Reina Sofía University Hospital (HURS), Córdoba, Spain

⁵Nursing Department, Alicante Institute for Health and Biomedical Research (ISABIAL, Group 23), University of Alicante, Alicante, Spain

⁶Research Unit of the Primary Care Assistance Management (GAAP), Primary Care Biomedical Research and Innovation Foundation (FIIBAP), Madrid, Spain

⁷El Instituto de Investigación Sanitaria del Hospital Clínico San Carlos (IdISSC), San Carlos Hospital, Madrid, Spain

⁸Research Network on Chronicity, Primary Care, and Health Promotion and Prevention (RICAPPS), Mallorca, Spain

⁹Primary Care Management of Mallorca, Balearic Islands Health Service, Institute for Health Research Illes Balears (IdisBa), Balearic Islands, Spain

¹⁰Directorate General of Public Health, Canary Islands Health Service, Las Palmas de Gran Canaria, Spain

Correspondence

Manuel Rich-Ruiz, Maimónides Institute for Biomedical Research (IMIBIC), University of Córdoba, Reina Sofía University Hospital, 14004 Córdoba, Spain.
Email: mrich@uco.es

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Abstract

The COVID-19 pandemic triggered an unprecedented health crisis that impacted healthcare systems worldwide. This study explores how Spanish healthcare workers learned, internalised and integrated values and work behaviours during the COVID-19 pandemic and their impact on the personal sphere. This documentary research, using images, narratives and audiovisual content, was framed within the interpretative hermeneutic paradigm. Categories and subcategories emerged after a final theoretical sampling that focused on the analysis. Data triangulation between researchers favoured theoretical saturation. A total of 117 images and 27 texts were selected. The analysis identified three stages: bewilderment, seeking functionality in the chaos and integrating chaos into care. The data reflects how the need for security and knowledge, and the exhaustion and frustration caused by the initial working conditions, prompted adaptive responses. These responses involved focusing on problem-solving and strengthening group sentiments and solidarity. Subsequently, the data indicates the acceptance of new structural, organisational

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and communication aspects. The findings of the analysis will contribute towards finding a framework that can help understand community health crisis events.

KEYWORDS

COVID-19, documentary research, nursing, pandemics, personal narrative, photography, professional practice, qualitative research

1 | INTRODUCTION

The SARS-CoV-2 pandemic placed healthcare workers (HCWs) in exceptionally challenging conditions, particularly during its initial stages when health systems collapsed due to the surge in infected patients. In Spain, a total of 238,564 confirmed COVID-19 cases were reported, resulting in 27,121 fatalities, according to data from the Ministry of Health, Government of Spain (2021). HCWs were overwhelmed as they lacked the necessary means to cope with the situation (Adams & Walls, 2020; Moreno-Casbas & the Grupo SANICOVI and Grupo de profesionales de la salud trabajando en la pandemia COVID-19, 2020). HCWs had to deal with challenging situations based on contradictory information that changed as more information about the virus became available (Moradi et al., 2021). Change and uncertainty were constant during the first months of the pandemic, placing HCWs in a situation of extreme vulnerability. The inconsistencies in the information about infection instilled fear, not only about their own health but also about the potential transmission to their loved ones (Bahramnezhad & Asgari, 2020; Bueno Ferrán & Barrientos-Trigo, 2021; Jiménez-Giménez et al., 2021).

The work environment for HCWs is exceptionally demanding intellectually, physically and emotionally (Chen et al., 2020). This triggered individual stress reactions, including physical symptoms such as headaches, sleep disturbances, back pain and stomach problems. Regarding their mental responses, HCWs experienced irritability, hostility, loss of concentration, low self-confidence and emotional instability (Bueno Ferrán & Barrientos-Trigo, 2021; Lai et al., 2020). Furthermore, significant symptoms of anxiety and depression have been reported (Alonso et al., 2022; Aymerich et al., 2022; Cai et al., 2020; Luceño-Moreno et al., 2022; Pappa et al., 2020; Paterlini et al., 2022; Ratzon et al., 2022; Roberts et al., 2021).

Extensive literature describes the significant challenges experienced by HCWs in their personal, work and social trajectories during the COVID-19 pandemic (Bueno Ferrán & Barrientos-Trigo, 2021; Fernández-Castillo et al., 2021; González-Gil et al., 2022). However, there are fewer studies focusing on how these professionals learned, internalised and integrated these experiences and on the 'hidden' personal and social trajectories that have shaped their personal, professional and social identities.

Understanding how these professionals learned, internalised and integrated these experiences during this period requires the theoretical elaboration and definition of key concepts, such as adaptation, learning and the internalisation and integration of acquired behaviours.

The concept of adaptation is defined as the process by which individuals respond positively to changes in their environment. This adaptive response depends on the stimuli received and the level of challenge that individuals can readily address using their habitual adaptive mechanisms (Roy, 1997). Thus, extreme situations inherently present stimuli that are not easily addressed adaptively. To achieve a positive response, the development of capabilities becomes essential. In this context, social learning plays a crucial role in understanding that learning extends beyond the individual level and occurs through interactions among different actors, particularly within the workplace (Cretney, 2016). Following the theory of organic integration (Deci & Ryan, 2008), we arrive at the concept of internalisation and integration of socially learned behaviours. When this process fails, individuals may experience a lack of motivation, perceive limited opportunities to alter the course of events and struggle with confidence in achieving expected outcomes. These challenges hinder individuals' ability to adapt to emerging needs.

Previous studies examining how HCWs learn and adapt to new demands in the workplace have identified three key catalysts: mentorship, workplace camaraderie and highly functional teams (Jantzen, 2019). When these catalysts are insufficient, HCWs may experience prolonged periods of confusion and burnout. However, when these factors are robust, HCWs can swiftly progress through the stages of the adaptation process (Kim & Kim, 2021). The significance of the interactions that HCWs established with their environment while learning and adapting during the COVID-19 pandemic is evident in the core category of this study: 'Growing as proficient nurses alongside comrades on the COVID-19 frontline'. This category closely aligns with the essential structure of the phenomenon identified by Maben and Bridges (2020): 'Growing after the frontline battle against an infectious disease pandemic'.

Many experienced HCWs, in accordance with Benner's professional socialisation process (Benner, 2001), were catapulted into an unknown field when they became frontline workers and were expected to deal with numerous new and unfamiliar tasks (Heiden et al., 2023). While adapting to care for COVID-19 patients, they went through periods of confusion, exhaustion, progress and stabilisation. They used interaction strategies to strengthen themselves, to endure and to see the end of the COVID-19 pandemic (Kim & Kim, 2021). However, in this context where all HCWs were novices, Heiden et al. (2023) highlight how 'the general lack of knowing in terms of COVID-19 gave rise to constant and conscious reflection, resulting from the unusually tolerant atmosphere and strong team spirit'.

The psychological distress faced by HCWs during this pandemic—when thrust into a new situation without knowing what to do—will also occur in future health crises. It is crucial to understand how this process was experienced and how socially learned knowledge, values and behaviours were internalised and integrated during the initial wave of the COVID-19 pandemic. This understanding will inform proactive and multifaceted strategies for the future.

This study aims to comprehend how HCWs who cared for patients infected with or suspected of being infected with SARS-CoV-2 during the state of alarm learned, internalised, and integrated values and work behaviours and their impact on the personal sphere. Furthermore, the specific objectives were to: (1) understand the impact experienced by HCWs during the pandemic through the images and the narratives told, (2) determine the process of transformation and change experienced through the images and their stories, (3) interpret the feelings and emotions that emerge from the stories and the photographs and (4) explore the different coping strategies for dealing with the experienced situation.

2 | MATERIALS AND METHODS

2.1 | Design

This is a documentary research, using images, narratives and audiovisual content created by HCWs. This research is situated within the interpretive hermeneutic paradigm proposed by Heidegger. It aims to uncover the experiences and hidden meanings of HCWs who provide care for people diagnosed with COVID-19. Rather than focusing solely on describing the phenomenon, this research adopts an interpretive approach, actively involving researchers in the process of interpretation (Heidegger, 1927, 2022). By analysing the images and studying the narratives, the underlying meaning behind these experiences can be deduced.

To reveal these often-hidden experiences, images serve as an indispensable tool by encapsulating ideas, attitudes and personal and collective values to describe and interpret reality (Zarco Colón, 2016). Previous literature within the field of visual studies (Moxey, 2009) has highlighted the role of images as a mediating channel in the political and social spheres. Visual studies adopt two key perspectives: photoethnography, where researchers actively create images (Cloutier, 2016), and the collection of images for studying the social world (Banks, 2010). In the latter perspective, the analysis of the photographs provides insight into participants as human beings embedded in society by revealing their hidden personal trajectories through artistic images (Aranda et al., 2015; Evans-Agnew et al., 2017). Consequently, the photographed stories foster potential dialogues with the public and wider society, facilitating the translation and exchange of knowledge of a societal scale.

The intentional combination of visual and verbal language enables the identification of concepts that are difficult to represent and describe. Such a combination of data sources (images and narratives)

constitutes a valuable tool for interpretative, biographical/personal and contextual research, as evidenced in several studies (Andina-Díaz et al., 2022; Pérez Samaniego et al., 2011; Riessman, 2008).

Therefore, this theoretical and methodological approach is based on two assumptions. On the one hand, photography allows researchers to observe, analyse and theorise social reality. More specifically, having images as data helps to contextualise what is observed and enables a deeper exploration of aspects that may be less visible through other means of recording observations (Bonetto, 2016). On the other hand, narrative plays a fundamental role in the social construction of experience derived from personal encounters. Narrative can also serve as a bridge between the subjective and more objective aspects of scientific research (Siles-González & Solano-Ruiz, 2014).

2.2 | Participants and location

The participants in this study (IMPRESIONA) were HCWs (nurses, physicians, geriatric carers and healthcare assistants) who had provided care in primary care, hospitals and social and healthcare institutions across various cities in Spain, Madrid, Murcia, Barcelona, Araba, El Bierzo, Elche, Huelva, Burgos, La Rioja, Baleares, Córdoba and Albacete, during the Spanish state of alarm (14 March to 21 June 2020).

2.3 | Data collection

This research is part of a mixed-methods project encompassing both quantitative and qualitative domains, the IMPRESIONA project, funded by the BBVA Foundation through its COVID-19 research grants. IMPRESIONA project is a study that aims to understand the personal, occupational and family impact of the SARS-CoV-2 pandemic on health professionals in health and social healthcare institutions who cared for SARS-CoV-2 patients globally and according to the different work settings. The project included an online application that integrated the follow-up of the participating subjects (the participant cohort) with resources on emotion management, emotional regulation and self-care.

For qualitative data collection, convenience sampling was used by requesting HCWs to provide photos depicting their experiences during the SARS-CoV-2 pandemic, accompanied by a written narrative account describing the situation captured in each image. The inclusion criteria stipulated that the images must originate exclusively from HCWs participating in the IMPRESIONA project and that they were taken during the first wave of the pandemic. Throughout the data collection, to increase the number of contributions, the request was extended to the participating centres, resulting in the retrieval of numerous images and audiovisual content compiled through various internal initiatives (such as informal group motivation, use in social media and commemorative art exhibitions). These images were intended for public use, created freely and spontaneously and carried an official and institutional character.

More than 250 images were collected from different centres across Spain, primarily from hospitals (Balearic Islands, Cordoba, Murcia, Huelva and Elche), social and healthcare institutions (Valladolid) and community areas (Murcia). The images that were redundant in terms of content or did not contribute relevant information to the established objectives were eliminated. Ultimately, 117 images were selected.

To triangulate sources and avoid a lack of narratives, publicly available narratives from HCWs were also collected (Supporting Information S1). Specifically, more than 250 written narratives available on the Index Foundation website (http://www.fundacionindex.com/fi/?page_id=107) helped to complement the information from the images received.

2.4 | Data analysis

Based on the materials recovered in the strategies described above, an interpretative analysis of the images was conducted in several phases. Initially, the researchers provided their pre-analytical impressions individually. Subsequently, photo-forums were organised to reflect on and analyse how HCWs learned, internalised and integrated their experiences during the pandemic, as well as the personal, social, family and work-related impact within the context of care.

Thus, 117 images were selected. The main characteristics of these images are summarised in Table 1. The images received lacked explanatory narratives, except for those originating from two personal photographic projects by health professionals from Huelva and the Balearic Islands (both types of images, with and without explanatory narratives, were treated similarly and as a single source of data).

Next, the incipient analytics ideas of the basic social process experienced during the pandemic emerged. These incipient analytics ideas helped to focus the following selection of materials using theoretical sampling.

Later on, regarding the publicly available written narratives, a total of 27 texts addressing the research objectives were selected. The analysis of the texts written by the HCWs allowed for a systematic study of the meaning attributed by this group to their personal experience, thereby exploring the particularities of human thought. In addition, they were used to triangulate the data obtained through images.

The data derived from both images and narratives were integrated through a process of coding and organisation (integration of the etic and emic perspectives). The following steps were followed:

1. Coding and organisation of images into incipient codes and their subsequent categorisation and grouping into broader analytical units.
2. Enrichment of the analysis by focusing on more abstract concepts through the analysis of practitioners' narratives posted on social media.
3. Refinement of the construction of the identified social processes.

For instance, within the analytical unit of 'Mechanisms of integration', there were various categories across the institutional,

TABLE 1 Characteristics of the images received.

Characteristics	
Origin/places	Cordoba, 50; Balearic Islands, 25; Elche, 6; Castile and Leon, 3; Murcia, 17; Huelva, 16
Setting	Hospital, 109; Community, 4; Socio-sanitary, 4
Thematic	equipment, new technology, delimitation of spaces, new circuits, caressing hands, disinfectants, surveillance behind glass, applause, hugs, deserted streets, mask marks on faces, appropriate and improvised personal protective equipment, nature.
Types of images	With narratives: Huelva and the Balearic Islands Without narratives: all other places/origins
Filiation	Cordoba: Covid Reporters of Córdoba. Balearic Islands: Javier García and the Cordoba Hospital Management. Huelva: Fran Fernández (Juan Ramón Jiménez Hospital). Castile and Leon: Regional Health Management. Murcia: Management of the Area VII, Murcia Health Service.

Source: Own elaboration.

social and personal domains. In the personal domain, the sub-category 'Coping mechanisms' emerged, comprising various codes related to physical effort, emotional effort, improvisation and avoidance. A few data extracts from these codes are, for instance, that 'hand to which you can hold tightly', those 'words of encouragement and relief' or those 'images depicting open spaces and nature' which emerged from the harshness of the situation experienced by the HCWs.

2.5 | Rigour

The rigour and quality criteria adhered to in this research align with those established by Calderón (2002). These criteria encompass: (a) Theoretical, epistemological and methodological appropriateness: the use of images aids in contextualising observations and delving into otherwise invisible aspects. Simultaneously, the narratives play a fundamental role in the social construction processes; (b) Relevance: understanding how the impact occurred and its characteristics and conditions enhance our comprehension of the experienced process and can inform preparedness for similar situations; (c) Validity: triangulation between techniques and among the research team was conducted; (d) Reflexivity: the authors are particularly aware of the importance of nursing care. Several of the researchers worked as HCWs during the pandemic, and the 'emic' perspective has required them to share and reflect on insights and experiences linked to their work.

2.6 | Ethical considerations

The study was conducted in compliance with the principles of the Declaration of Helsinki and was approved by the Ethics Committee of the Instituto de Salud Carlos III (Spain) (No: CEI PI 80_2020-v3), with Subject Information and Informed Consent. Personal data obtained were processed in accordance with the General Data Protection Regulation EU/2016/679, dated 27 April 2016, and the provisions outlined in the Organic Law 3/2018, enacted on 5 December, which pertains to the Personal Data Protection and Digital Rights Guarantee.

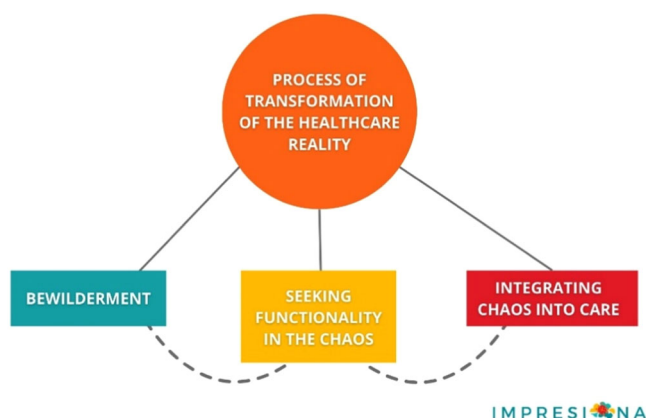


FIGURE 1 Stages in the process of transforming the reality of care.

3 | RESULTS

The combined analysis of the images and narratives identified three stages in the process of learning, internalising and integrating the experiences: bewilderment, seeking functionality in the chaos and integrating chaos into care. The first days and weeks were characterised by bewilderment and uncertainty. However, as the initial weeks of the pandemic passed, changes in the organisation of healthcare took place to adapt to the situation and to 'care in chaos'. This process oscillated like a pendulum, ranging from bewilderment to integration while constantly searching for functionality (Figure 1).

Different categories and subcategories also emerged during these phases. Institutional responses related to spaces, equipment, organisation (including professional relations) and patient–family interactions. Personal responses focused on the impact's characteristics, coping mechanisms and consequences (Figure 2).

3.1 | Bewilderment stage

Despite the international information that had been received, the sudden arrival and rapid spread of the first cases in Spain caught professionals off guard. The lack of knowledge about the pathology itself, as well as about the way it behaved, led to significant confusion among HCWs. Fear of the unknown, uncertainty about how to act and insecurity characterised this first stage.

COVID-19 is, at least for me, the disease of fear, well, of the awakening of fears I had never felt before: fear

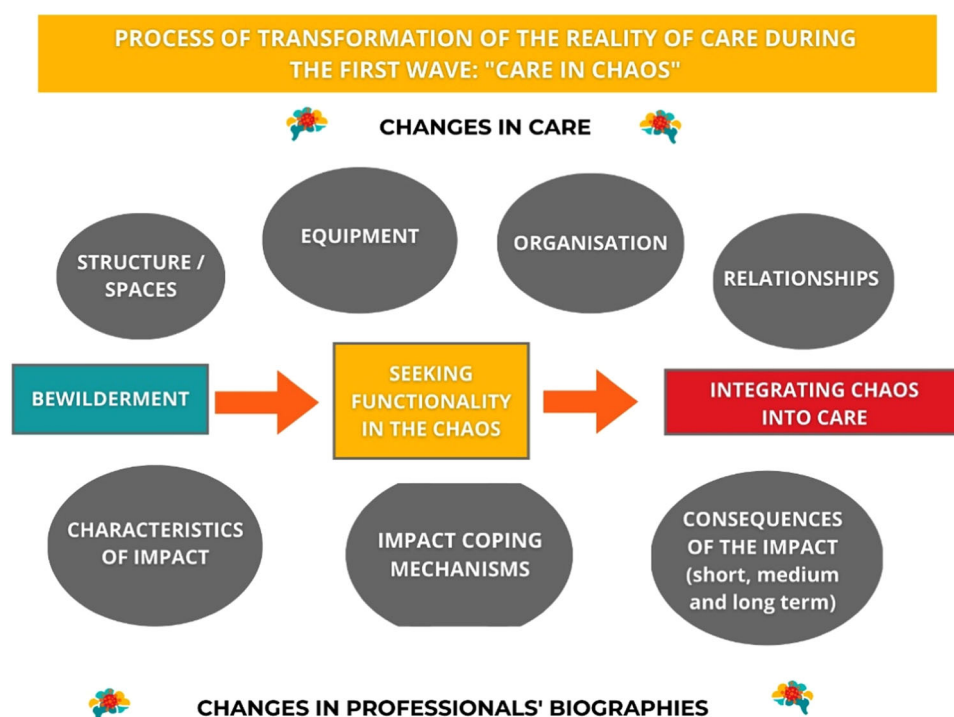


FIGURE 2 Care in chaos. Stages and categories.

of not recovering my previous state, fear of not being competent in my work, fear, almost paralysing, of becoming infected again in my work. It's a fear that worries me and makes me feel unlike myself; because the me I know, the one I have shared these 43 years, does not have that irrational fear. (D5)

With my colleagues I shared not only physical space, but also moments of stress, when we shared information and discussed how to organise activities, that is when the divergence emerged. (D2)

During the onset of the state of alarm, individuals exhibiting symptoms were instructed to contact their health centres by telephone, which quickly collapsed due to the high demand. Simultaneously, the number of COVID cases and critically ill patients surged in social and healthcare institutions. Eventually, even hospitals faced capacity challenges.

At 5 in the morning the other user who was sedated died and the funeral home has still not been able to take away the one who died first. They are collapsed, they don't have enough staff. (D6)

HCWs had to profoundly change their care practices. Underlying everyone's mind was a 'battlefield' care.

How are we going to do it? Was the first of countless questions that were arising as the days went by. And it was because a new action protocol had been established that implied a different work organisation and we had to adapt... days of change, uncertainty, and adaptation. (D14)

In this context of overwhelming demand, materials became scarce, and frustration among professionals surfaced frequently.

The nurse feels powerless, 'hand tied', knowing that she cannot do more for those who are currently suffering, 'We long to touch the hand of the patient who is vulnerable and make them feel our affection, but in these moments, it is impossible. (D3)

Nevertheless, beyond the frustration, HCWs put all their ingenuity and initiative to work and took advantage of any material (rubbish bags, plastics or incomplete equipment) to make their own handmade protective equipment. Many of the photographs submitted show this.

3.2 | Seeking for functionality in the chaos stage

The unfolding of the COVID-19 pandemic required a continuous and dynamic reorganisation across all levels, from strategic decision-

making to operational adjustments related to space distribution and work structuring, the distribution of space or the structuring of work. Finding functionality within the chaos was essential.

One critical aspect of this adaptation involved reconfiguring physical spaces. In health centres and emergency departments, triage areas (at the entrance), respiratory consultation zones and isolation spaces were swiftly established. Simultaneously, hospitals underwent continuous reconversions of their care units into COVID-19 wards. Numerous photographs document these spatial adaptations. The primary objective was to redefine the environment to prevent infection transmission. Within COVID-19 units, corridors were split into two with dividing lines, ensuring clear separation. Remarkably, even non-traditional spaces, such as churches, were repurposed for this purpose.

The need for protection against contagion is vividly evident in the equipment used. Personal protective equipment (PPE) became a staple resource and a powerful symbol of the crisis.

They have switched to having to work with personal protective equipment which is not at all comfortable and makes it difficult to carry out techniques... They get into their suits and spend hours in them to maximise their utility. (D8)

Alongside PPE, clinical equipment—such as respirators—was used to symbolise the arsenal in the fight against SARS-CoV-2. This equipment enabled hospital intensive care units (ICUs) to save countless lives.

During this stage of functionality-seeking, organisational changes were also frequent in the discourse of the HCWs. They emphasise the almost daily need to adapt to new guidelines.

We are constantly inundated with procedures and work protocols: how to take COVID-19 PCR samples, donning and doffing PPE, monitoring of high-risk and vulnerable users. Hours and hours of work, physical exhaustion, mental fatigue, uncertainty, not knowing how it will be or what will change the next day.... (D13)

For care provision, task-based organisation became not only the most efficient way of working but the only feasible approach.

The images also highlighted the interprofessional communication problems that arose with the use of PPE. Professionals labelled their PPE with their names so that they could be identified.

However, perhaps the most significant communication losses occurred with patients. PPE prevented many patients from seeing the person behind it. Patients could not be touched without protection. But, above all, they could not say goodbye to them in a personal way.

What we found most difficult was the safety distance, accustomed as we were to touching each other, then it was even worse with the mandatory use of masks, the facial expression nullified....' (D11)

Visual documentation captured numerous images of the changes in personal lives experienced by the healthcare team. The images highlight the collective sentiment of camaraderie, solidarity and shared fortitude, even amidst the overwhelming solitude of those times. These photographs frequently captured them traversing hospital corridors, poised to tackle the adversities ahead. Their unity was their strength, enabling them to overcome any challenge together.

In this setting, gestures aimed at sustaining and disseminating morale—such as thumbs up among the team—and those expressing gratitude to the public—like hands forming hearts—became common. These actions seemed to forge support networks linking professionals to each other and to society at large.

Moreover, in this context of emotional connectivity, a growing sense of responsibility emerged as the backbone of the service. The boundaries of delivery were constantly being pushed.

I never paused to question it, nor did I contemplate the possibility that it might not be so, that something might arise that would not even allow me to accompany my patient, alone in his room, as he bid farewell to this world without a kiss, without a caress, without a glance from his loved ones. (D9)

My department was among the first to close, but I did not hesitate to make myself available to the hospital. I am a nurse, I like my profession, I am happy doing what I do, and I knew that my place was alongside the Covid patients. There were no hours, nor shifts. I knew when I would come in, but I never knew when I would leave. (D12)

Suddenly I start to cry, I loved her very much. After a moment, I dry my tears, pull myself together, and continue working... I am exhausted, I have no strength left, but I have to go on.... (D6)

Among the elements that characterised the new 'functionality', the capacity for adaptation, for constant reinvention, also stands out. This ability appeared as an inherent characteristic of the nursing profession.

Everything was very dynamic, we operated in spaces of uncertainty, and we took risks, and we did it all together, professionals and users, without a doubt, all of which made us stronger and brought us closer together. We were constantly reinventing ourselves. (D13)

We have confirmed how the nursing profession is 'hyper dynamic', with the ability to adapt to new contexts more swiftly than other professionals, given their pragmatism, everything becomes more bearable, and solutions arise spontaneously, and this makes the

work much easier, work that is overwhelming both on a physical and emotional level. (D10)

However, the responsibility to respond in such an uncertain situation, with so many changes and the constant need to adapt to this changing reality, also led to negative consequences. Images showing exhaustion were frequent: people with marks from masks or protective glasses, sleeping in chairs, with their eyes closed and heads resting on their hands....

I go to work only thinking about resting and the days off. Faltering at the sight of so much misfortune. Already tired of everything. (D6)

The harshness of the situation experienced by the HCWs often led to the emergence of images depicting open spaces and nature. These served as a means of escape and detachment from the reality that they encountered daily, evoking memories of normality.

Despite the challenges, there was a profound sense of satisfaction. Examples illustrating this sentiment were frequent.

Gathered for the eight o'clock applause, which recognised the value of health, which money does not buy but is necessary to maintain it. Gathered at the windows, to share a moment of music. (D5)

3.3 | Integrating chaos into care stage

This third stage is characterised by the acceptance and integration of numerous behaviours into daily practice (integration being understood as the successful adaptation to an adverse situation). The uncertain duration of the pandemic led to the belief that many measures would continue indefinitely, and that this new way of working would persist to survive the situation.

The images show how the separation of spaces started to become part of the usual work setting and how HCWs incorporated protective equipment into their practice as a stable reality. The initial challenges such as repositioning patients into a prone position or operating various ventilator models in ICUs, no longer posed a significant issue.

Personal protection and hygiene measures, such as handwashing, the use of disposable tissues and avoiding touching the nose, eyes and mouth, took on a new, even more fundamental dimension than before.

In this stage, communication technologies also became fundamental elements for patient and family care. Telephone consultations, in the case of Primary Care professionals, or the use of mobile devices to connect hospitalised patients with their families, became everyday elements of professional practice. Numerous photographs showed how professionals used mobiles and tablets to connect with relatives.

The first communication via tablet with the relatives, it was so emotional! We had 'easy' tears... that day I returned home happy. (D11)

Technology, television and other devices also became working tools to combat the loneliness of those isolations, so necessary to contain the infection, but so hard at an emotional and social level.

In the personal narratives, the previous phase's gestures of encouragement and gratitude towards the team and the population gave way to emotional caresses. HCWs supported each other, a sentiment captured in images that showcased the strength of teamwork.

If there is one thing we have learned in these very challenging months, it has been to recognise our capacity to bond and protect each other. (D10)

This visible emotionality within professional relations also became the protagonist in relations with patients. Empathy grew even stronger, if possible, in patient contacts.

A lot of energy these months, I have felt tired at times and also satisfied with my work and with continuing with the bereavement care of these people who have suffered the loss of their family members. A lot of learning, it was necessary to empathise, to listen to people with that pain, with that feeling of emptiness that occurs when someone very dear to you dies. (D8)

Just as, despite the two pairs of gloves, there is always a hand to which they can hold tightly, in that moment the greatest of our treasures, contact, layered and protected, but contact nonetheless. And also a word of encouragement and relief, a simple 'don't worry' that does little to compensate for everything that follows after we disappear behind doors, leaving behind a frightened patient without their family. (D24)

Thus, many biographies have integrated positive emotions. It is important to highlight an even greater feeling of satisfaction. Examples illustrating this reality were very frequent.

And they started discharging patients, some recovered, others did not... but each day there were fewer. The lockdown had its effect. The extreme happiness. Their completely changed faces, the joy on their expressions, the gratitude.... (D12)

Alongside satisfaction, the previous stage's avoidance transformed into hope, a feeling of energy upon which HCWs ultimately built their daily care at that moment.

They were some very intense and hard work weeks where, above all, we strived to maintain hope and enthusiasm, working under dire conditions.... (D6)

However, acknowledging the emergence of positive emotions does not mean that earlier stages were 'burned out' or that the

'search for functionality' was overcome. The resilient behaviours of some professionals coexisted, also at this time, with the deepest sadness, helplessness or frustration of others.

In conclusion, the described process does not aim to name any finality but to collect the institutional and personal responses of some HCWs who are still navigating this path.

4 | DISCUSSION

The results show the emotions, feelings and behaviours that characterised the way in which health professionals who cared for patients infected or suspected to be infected with SARS-CoV-2 learned, internalised and integrated work values and behaviours during the state of alarm, in accordance with the objectives planned. Its comparison with studies that analyse moments of crisis (Muz & Erdoğan Yüce, 2021; Scrymgeour et al., 2020; Stewart, 2020), as well as its comparison with other research on responses given by professionals during the pandemic, reflect enough similarities. In this context, the data from our analysis has allowed us to identify three stages with their own expressions in each of them, as shown in the results. However, we believe it is interesting to highlight the most relevant aspects of this process.

4.1 | Contrast of emotions

In the short period analysed (state of alarm during the first wave), the professionals showed feelings of uncertainty and insecurity (derived from ignorance of the new disease), fear and apprehension (especially of contagion for themselves and/or family members) and an immense frustration (due to the collapse of health centres, the physical and mental pressure to which they were subjected and the lack of the necessary material resources). These findings are similar to Daphna-Tekoah et al. (2020), Moradi et al. (2021), Bahramnezhad and Asgari (2020), Simms et al. (2020) and Labrague and Santos (2021).

However, they simultaneously developed initiatives full of ingenuity to save situations (making up for the lack of means of protection, facilitating communication despite PPE) and showed signs of positive emotions such as satisfaction and hope. These are stories that reflect the capabilities and the 'endurance' of nurses in catastrophe situations. This is also mentioned by Kim and Kim (2021) and Coll Benejam et al. (2021).

The physical and emotional exhaustion of professionals, largely derived from the high workload and endured working conditions, is perceived as a constant during the study period and it is thus detected in both images and narratives (Buselli et al., 2020).

4.2 | Great adaptability seeking functionality

Narratives and images refer to a structural, dynamic and constant reorganisation, with separation and new uses of spaces. They also

reflect the continuous updating of Health Services guidelines, both at the ministerial level and at the regional services, and what this meant for professionals. Above all, the major organisational readjustments necessary to achieve maximum efficiency stand out, a context in which task-based work became essential (Heras, 2020).

4.3 | Mutual support: Strengthening the group

During the period studied, a change in knowledge and security needs became visible. In this context, feelings of belonging and recognition by the teams played a central role in learning from adversity. The stories contained in this study reflect how without 'friendship, camaraderie and a sense of belonging to a larger family, they would not have been able to work in such difficult conditions'. These findings are consistent with Arenas-García and Mirón-González (2022), Marler and Ditton (2021) and Avellaneda-Martínez et al. (2021).

The analysed images include gestures made to maintain and spread encouragement (thumbs up), gestures that called for collective strength (in the midst of absolute loneliness) and gestures of gratitude (hands simulating hearts).

4.4 | Internalising what was learned

In this way, the new interactions that the different actors established during this period allowed professionals to experience a feeling of competence in their activity and confidence in achieving the expected results, which had an impact on their perception of their ability to change the course of the processes, events and, ultimately, on the attention provided during the state of alarm.

5 | APPLICABILITY OF FINDINGS

If we consider HCWs as the main agents of change within their own contexts, from a sociocritical perspective, the feedback provided by the conducted analysis will contribute towards finding a framework that can help understand community health crisis events and will facilitate the search for the best strategies in similar situations.

The adaptation phases identified in this study, comparable to other research in similar circumstances (Schreiber et al., 2019), the significant role played by team spirit and camaraderie in learning and adaptation processes (Heiden et al., 2023), and the trust described between professionals and the community (Wong & Kohler, 2020) during the first wave of the COVID-19 pandemic are specific aspects identified by this study. These findings can serve as a foundation for formulating future action policies and practical guidelines for HCWs. Additionally, their inclusion in curricula should be considered to help retain the lessons learned in such an exceptional context, ensuring they are not forgotten once the pandemic is over.

Furthermore, it is expected that the lived experiences and acquired competencies will have an impact not only on the mental

health of professionals but also on the well-being of the individuals they care for.

The richness and expressiveness of the analysed images have been used by the researchers to disseminate the professionals' experiences during those critical days. To this end, travelling exhibitions have been organised nationwide and are showcased on the project website at the following link (<https://impresiona.isciii.es>).

5.1 | Study limitations

When considering the images analysed in this project, it is crucial to recognise that they originate from participating professionals or institutions. Consequently, they reflect an internal perspective of the experienced process. In the case of the narratives, they were also taken from the repository available on the Index Foundation website, although, even in this case, it is essential to recognise that images and narratives are exclusively from the Spanish context, which may impact their transferability. However, it can be argued that the pandemic's onset yielded universal and common images of its impact, albeit from diverse origins, societies and countries. In these images, health professionals assumed extraordinary prominence and collective gestures of recognition and gratitude manifested through applause on balconies. Notably, media representations transformed nurses into heroes, a symbolic portrayal that has been subject to analysis: nurses who endured necessary sacrifices, embodying model citizenship, where the sacrifice itself became the reward (Mohammed et al., 2021).

While this study only focused on the state of alarm, it is essential to remember that the collective sentiment at the time was that everything would return to normal afterwards. However, successive waves of contagion prolonged the pandemic, maintaining pressure on health professionals and institutions and leading to social exhaustion (Collins, 2020).

The application of an interpretative methodology facilitated systematic analysis, with an empiric-inductive approach followed by theoretical conceptualisation. Nevertheless, it is crucial to recognise that multiple interpretations exist for any given text. Furthermore, many of the analysed images lacked accompanying narratives from their authors, potentially creating a disconnect between the intended meaning by the photographers and the researchers. In this context, analysing narratives from other HCWs strengthened data triangulation.

Finally, due to the study's focus on the collective subject, individual differences were not explored, nor did it capture participant profiles (ages, experiences) or environmental characteristics (economic, cultural, etc.), all of which decontextualise the data.

5.2 | Future lines of research

The results of this research, along with those of other studies on sustained exposure to extremely demanding working conditions

(Jiang et al., 2020; Ma et al., 2020; United Nations, 2021), highlight HCWs as one of the primary populations at risk of developing severe psychological symptoms.

The adaptation process experienced by key actors during the initial wave of the COVID-19 pandemic opens the door for new studies that can help professionals and institutions develop anticipatory strategies to respond to similar situations, both organisationally and emotionally.

While this study has focused on frontline HCWs, given the impact of the lived situation, exploring the adaptation process at other organisational levels could be of interest.

6 | CONCLUSION

The analysis of images and narratives created by HCWs who cared for suspected or infected SARS-CoV-2 patients during the state of alarm in Spain identified three stages in the learning, internalisation and integration of values and work behaviours: bewilderment, seeking functionality in the chaos and integrating chaos into care. However, it is important to note that this process occurred pendulum-like throughout the entire period.

The organisational and structural changes that occurred within a very brief time frame are documented. These changes included space restructuring, the implementation of previously unused protective measures and the need to provide care differently from usual, necessitating task-based organisation.

Furthermore, the barriers imposed to curb contagion between professionals and patients led to new forms of communication and the use of novel consultation methods (phone calls and video calls).

Emotional repercussions were expressed through contrasting feelings throughout the entire period. Negative emotions such as fear, dread, insecurity, injustice, sadness, frustration, stress, fatigue and mental exhaustion coexisted with positive ones like energy, determination, solidarity, empathy, group sentiment, pride, satisfaction, joy in healing and hope.

Finally, through the analysis of autobiographical accounts and image, an understanding emerged regarding the meanings attributed by HCWs to their experiences, shedding light on their internal worlds and those of the people around them. These images and narratives underscored the social resilience demonstrated by HCWs in learning from adversity despite widespread uncertainty. The strong team spirit and camaraderie provided the much-needed support, enabling constant and conscious adaptation and reinvention in the response to adversity.

Undoubtedly, these professionals endured significant suffering, but it is equally undeniable that they experienced professional and personal growth. However, as some authors suggest, we must wait a few years to fully grasp the consequences of the identities, subjectivities and emotions lived during this period.

AUTHOR CONTRIBUTIONS

Conception and design, or in the acquisition of the data, or in the analysis and interpretation of the data: Eva Abad-Corpa, Manuel

Rich-Ruiz, Dolores Sánchez-López, Carmen Solano Ruiz, Elvira Casado-Ramírez, María Isabel Orts-Cortés, María Teresa Moreno-Casbas and Daniel Muñoz-Jiménez. The acquisition of the data: Elvira Casado-Ramírez, Eva Abad-Corpa, Manuel Rich-Ruiz, Rafaela Camacho-Bejarano, Isabel Fera-Raposo, Daniel Muñoz-Jiménez, Dolores Sánchez-López, M. Clara Vidal-Thomàs, M. Consuelo Company-Sancho. Writing of the manuscript and revisions: Carmen Solano Ruiz, María Isabel Orts-Cortés, María Teresa Moreno-Casbas, Beatriz Arregui-Gallego, Eva Abad-Corpa, Manuel Rich-Ruiz, Sánchez-López Dolores, Elvira Casado-Ramírez.

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IMPRESIONA TEAM

Eva Abad-Corpa, Isabel Alonso-Durana, Beatriz Arregui-Gallego, Leticia Bernués-Caudillo, Rafaela Camacho-Bejarano, Alfredo Cano Reyes, Montserrat Carmona-Rodríguez, Elvira Casado-Ramírez, M. Ángeles Cidoncha-Moreno, M. Consuelo Company-Sancho, Estibaliz Cristobal-Dominguez, Silvia Esteban-Sepúlveda, Isabel Fera-Raposo, M. Ángeles García-León, Javier Iruzubieta-Barragán, Noelia López-Rascón, Cristina Lozano-Ochoa, Xosé Manuel Meijome-Sánchez, María Teresa Moreno-Casbas, Daniel Muñoz-Jiménez, María Isabel Orts-Cortés, Lorena Pinilla Navas, Alda Recas Martin, Manuel Rich-Ruiz, Marina Ruiperez-Segura, Dolores Sánchez-López and M. Clara Vidal-Thomàs.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Eva Abad-Corpa  <http://orcid.org/0000-0003-2164-4967>

Manuel Rich-Ruiz  <http://orcid.org/0000-0003-3317-267X>

Dolores Sánchez-López  <http://orcid.org/0000-0002-1875-1035>
 Carmen Solano Ruiz  <http://orcid.org/0000-0001-8720-8397>
 Elvira Casado-Ramírez  <http://orcid.org/0000-0002-3077-5670>
 Beatriz Arregui-Gallego  <http://orcid.org/0000-0002-3735-6735>
 María Teresa Moreno-Casbas  <http://orcid.org/0000-0001-9061-4628>
 Daniel Muñoz-Jiménez  <http://orcid.org/0000-0003-4415-141X>
 M Clara Vidal-Thomàs  <http://orcid.org/0000-0002-9861-278X>
 M.Consuelo Company-Sancho  <http://orcid.org/0000-0002-5410-4791>
 María Isabel Orts-Cortés  <http://orcid.org/0000-0002-1504-575X>

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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