Received: 21 October 2022 | Revised: 30 December 2022 | Accepted: 5 January 2023

DOI: 10.1111/jocn.16633

Journal of Clinical Nursing WILEY

EMPIRICAL RESEARCH QUALITATIVE

COVID-19 pandemic experiences, ethical conflict and decision-making process in critical care professionals (Quali-Ethics-COVID-19 research part 1): An international qualitative study

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Funding information
Víctor Grífols y Lucas Foundation

Abstract

Aim and Objectives: The aim of this study was to explore the sources of ethical conflict and the decision-making processes of ICU nurses and physicians during the first and subsequent waves of the COVID-19 pandemic.

Background: Depside several studies exploring ethical conflicts during COVID-19 pandemic, few studies have explored in depth the perceptions and experiences of critical care professionals regarding these conflicts, the decision-making process or which have analysed the complexity of actually implementing the recommendations

of scientific societies and professional/healthcare institutions in interdisciplinary samples.

Design: A descriptive phenomenological study.

Methods: Thirty-eight in-depth interviews were conducted with critical care nurses and physicians from five hospitals in Spain and Italy between December 2020 and May 2021. A thematic content analysis of the interview transcripts was conducted by two researchers. Consolidated criteria for reporting qualitative research (COREQ) were employed to ensure the quality and transparency of this study.

Results: Two main themes emerged as sources of ethical conflict: the approach to end of life in exceptional circumstances and the lack of humanisation and care resources. The former comprised two subthemes: end-of-life care and withholding and withdrawal of life-sustaining treatment; the latter comprised three subthemes: the impossibility of guaranteeing the same opportunities to all, fear of contagion as a barrier to taking decisions and the need to humanise care.

Conclusions: Professionals sought to take their decisions in line with professional ethics and bioethical principles, but, nevertheless, they experienced moral dilemmas and moral distress when not being able to care for, or to treat, their patients as they believed fit.

Relevance to Clinical Practice: Further education and training are recommended on the provision of end-of-life and post-mortem care, effective communication techniques via video calls, disclosure of bad news and bioethical models for decision-making in highly demanding situations of uncertainty, such as those experienced during the COVID-19 pandemic.

KEYWORDS
COVID-19, ethical conflict, health care, humanisation, moral distress, pandemic, qualitative research

1 | BACKGROUND

The declaration of the COVID-19 pandemic by the World Health Organisation (WHO) was followed by a period of enormous economic and social impact, from which healthcare systems worldwide were not immune. Indeed, the changes that ensued affected patients and healthcare professionals alike, as hospitals were forced to adapt to the prevailing circumstances by updating clinical practice guidelines, protocols and care circuits.

At the beginning of the pandemic, between 11% and 26% of those infected developed severe cardiorespiratory complications, leaving public and private health systems overwhelmed by the demand for specialised care as admissions to intensive care units (ICUs) escalated alarmingly (González-Castro et al., 2020; Rascado-Sedes et al., 2020). Unsurprisingly, ICUs were hit by a shortage of resources, including ventilators, extracorporeal membrane oxygenation (ECMO) machines, prescription drugs and professionals trained in critical patient care and the management of standard ICU devices (Faggioni et al., 2021; Falcó-Pegueroles et al., 2021; Fernández-Castillo et al., 2020; Nelson, 2020; Vergano et al., 2020). Moreover, the medical crisis increased risk of exposure to ethical conflict, a situation that, in fact, predated the pandemic given the imbalance between provisions of logistical and personal (e.g., protective equipment) resources, which impacted both routine care and decision-making, especially in end-of-life situations (Pattison, 2020). Actions taken to address the emerging crisis and control the spread of infection included the imposition of periods of home confinement and the mandatory use of masks; however, these measures were to have far-reaching psychological, social and economic consequences (Barello et al., 2020; Maben et al., 2022; Villa et al., 2021). Healthcare professionals, moreover, were left pondering whether the steps they were taking to help their patients constituted the best course of action, as the debate underlying their decision-making was shifted to the realm of professional ethics and applied clinical bioethics.

Systematic reviews of the ethical issues that had emerged during earlier pandemics identified various sources of conflict: most notably, the fear that healthcare professionals might get infected and endanger their families; social rejection; a prevailing sense of duty and personal sacrifice in a context of limited resources; frequent changes in protocols, the lack of leadership and of relevant

What problem did the study address?

- The global economic, social and health impact of the COVID-19 pandemic.
- The nature of the relationship between end-of-life (EOL) care and fear of contagion, with psychological stress and suffering, as revealed in qualitative studies of the impact of the COVID-19 pandemic on critical care professionals.
- The scarcity of studies exploring ethical conflicts during the COVID-19 pandemic from an interdisciplinary and multicultural perspective.

What were the main findings?

- During the first wave of the COVID-19 pandemic, the decision-making process of critical care professionals was influenced by the imbalance between the demand on their services and ICU logistical and staff resources. In the second wave, decision-making was conditioned by excessive workloads that left ICU professionals having to support an intense physical, mental and emotional burden.
- Two major sources of ethical conflict were identified: (1) approaches to end of life under exceptional circumstances and (2) the lack of humanisation and critical care resources.
- The former presents two subthemes: (1) provision of end-of-life care and (2) withholding and withdrawal of life-sustaining treatment.
- The latter present three subthemes: (1) the impossibility of guaranteeing the same opportunities to all, (2) fear of contagion as a barrier to taking decisions and (3) the need to humanise care.

Where and on whom will the research have an impact?

- Findings have implications for training of critical care workers in times of pandemic, helping them to improve decision-making when faced by ethical conflicts derived from approaches to end of life and the problems generated by a lack of humanisation and the shortage of critical care resources.
- Despite differences in the cultures and health systems of Spain and Italy, it is evident that critical healthcare workers in southern Europe presented common sources of ethical conflict during the COVID-19 pandemic.

professionals from whom guidance or advice might be sought; the poor responsiveness on the part of organisations in their efforts to manage resources appropriately; and, the need to base admission criteria on patient safety and protection (Benbenishty et al., 2022; Choi & Kim, 2018; Czyz-Szypenbejl et al., 2022; Falcó-Pegueroles et al., 2021; Fernández-Castillo et al., 2020).

Recommendations from scientific societies and professional/healthcare institutions were, nevertheless, forthcoming, aimed at ensuring workers were protected from infection, providing guidance in relation to ICU admission criteria and other forms of life-sustaining treatment, and highlighting the need for resources during a global pandemic (Bonalumi et al., 2020; Cabré & Casado, 2020; Faggioni et al., 2021; International Council of Nursing, 2020; McKenna, 2020; Rushton et al., 2020; Vergano et al., 2020). Yet, despite the severity of the situation, barely a handful of studies have explored in depth the perceptions and experiences of critical care professionals regarding these ethical conflicts and their decision-making processes during the COVID-19 pandemic, or which have analysed the complexity of actually implementing these recommendations in interdisciplinary samples, while adopting a multicultural vision (Fernández-Castillo et al., 2020; Melnikov et al., 2022; Muñoz-Quiles et al., 2022). For this reason, we have deemed it pressing to undertake a comprehensive exploration of the ethical conflicts experienced by nurses and physicians involved in the care of critically ill patients based on an analysis of the factors that might have influenced the genesis or increase in ethical conflict during the COVID-19 health crisis and the associated decision-making process.

2 | RESEARCH QUESTION

What were the perceptions and experiences of intensive care professionals as regarding the ethical issues and associated decision-making processes derived from the care of critically ill patients during the COVID-19 pandemic?

2.1 | Aim

This study seeks to explore in depth the sources of ethical conflict of ICU nurses and physicians and their decision-making processes during the first and subsequent waves of the COVID-19 pandemic. This study forms part of a broader project, entitled Quali-Ethics-COVID-19, in which we examine the ethical conflicts and the protective factors that provided some form of defence against these conflicts as reported by ICU nurses and physicians in Italy and Spain during the pandemic. In this first part, we focus our attention specifically on ethical conflict and related experiences.

3 | METHODS

3.1 | Study design

We conduct a descriptive phenomenological study (Matua & Van Der Wal, 2015) to gain in-depth insights into the subjective experience of ICU nurses and physicians providing care during the COVID-19

health crisis and to discover and describe the meanings they give to their experiences, with a specific concern for the ethical conflicts experienced in ICUs during the various waves of the COVID-19 pandemic. In so doing, we adhere at all times to the consolidated criteria for reporting qualitative research (COREQ) guidelines (Tong et al., 2007) (Appendix S1).

3.2 | Setting and participants

The study was carried out in the ICUs of five public tertiary referral hospitals in Spain (Hospital Universitari de Bellvitge, Barcelona) and Italy (Ospedale Fatebenefratelli, Ospedale Luigi Sacco, Ospedale San Paolo, Ospedale San Carlo, Milano).

The participants were nurses and physicians working in ICUs (or areas converted to ICUs) during the first and second/third waves of the COVID-19 pandemic. The inclusion criteria for participation in the study were (1) being a healthcare professional with at least a year's experience working in an ICU, (2) having worked in critical care during the pandemic, (3) forming part of the hospital's regular staff and (4) volunteering to participate in the study. Students hired as healthcare assistants, medical students and professionals who did not have access to the equipment needed to participate in an online interview were excluded. Purposive sampling was used in the recruitment process ensuring heterogeneity of age, gender, profession (nurse or physician), years of professional experience and shift worked.

In both countries, the study was promoted on posters hung in the ICUs, via email and during informative sessions conducted by a member of the research team that was part of the facility's ICU but who did not participate in any of the interviews. This member was responsible for explaining to prospective participants the aim of the study and the nature of the interviews, and for forwarding contact details to the main researcher (MR) in each country and for managing the informed consent process. Once a professional had agreed to participate by signing the informed consent form, another member of the team (not linked to the participant's ICU or hospital) contacted them via e-mail to arrange a date and time for the interview (by videoconference). Of a total of 45 people that were contacted, 38 eventually agreed to participate, a sufficient number to provide data saturation.

3.3 | Data collection

In-depth interviews were conducted centred around a semi-structured interview script. The project's two MRs drew up guidelines in Italian and Spanish for the seven team members responsible for conducting the interviews in both countries, aimed at clarifying concepts and ensuring agreement on data collection criteria and methods. The interview script consisted of 10 open-ended questions centred on the four thematic axes to be explored: (1) Ethical conflict; (2) Decision-making process; (3) Protective factors of ethical problems; and (4) Improvement proposals to reduce ethical problems in times of health crisis. Here, we present the results for thematic axes 1 and 2 (note, our discussion of axes 3 and 4 constitutes a separate article).

TABLE 1 Open questions linked to the thematic axis ethical conflict.

1. During the health crisis due to COVID-19 that began last March and now in subsequent waves, what situations that you have experienced have led to or caused some type of ethical conflict?
2. To which professional do you attribute ethical responsibility when making decisions?
3. Do you consider that decisions-making in time of COVID was or is more complex than usual? If yes, to what would you attribute it?
4. What factors or elements do you consider influenced or have influenced you when making ethical decisions regarding critically ill patients? Are these factors the usual ones in decisions-making prior to the pandemic?
5. Based on your personal experience during the COVID-19 pandemic in the first and second waves, what were your needs when making decisions? What did you need to be able to take them better?

The interviews were open-ended and exploratory in nature. To initiate the interview, a general question was asked: "What situations have you experienced that involved or caused you some type of ethical conflict?", followed by other questions more closely focused on the specific thematic axes, such as "Do you consider that decision-making during COVID was or is more complex than usual? If so, what would you attribute that to?". Table 1 shows the interview script employed with the open-ended questions linked to thematic axis 1.

Data collection was carried out between December 2020 and May 2021, with a total of 38 in-depth interviews, 22 in Spain and 16 in Italy, until the theoretical saturation of the data was reached. The total recording time was 1143.90 min, with a mean of about 30 min per interview, the shortest being 17 min long and the longest 58 min. All interviews were conducted online via videoconference (due to the restrictions attributable to the COVID-19 pandemic), using the Teams® and Google Meet platforms and recorded. The interviewers recorded their own notes during the interview process in a field diary. These included descriptive, contextual, methodological and inferential comments (Denzin & Lincoln, 2000). Each interview was transcribed verbatim (including verbal and non-verbal language) by a translator with no links to the study, the transcript being sent to the participant for verification or revision, if appropriate. Only one informant modified one word of her interview, which did not involve a significant change in content.

3.4 | Data analysis

A thematic content analysis was performed on the transcripts in close adherence with Colaizzi's framework (Colaizzi's. 1978) for descriptive phenomenology. This comprised the following seven steps: (1) familiarisation with the data collected, (2) identification of significant statements (i.e., of direct relevance to the phenomena being studied), (3) formulation of meanings based on researcher reflection

of the significant statements, (4) clustering of meanings into common themes, (5) formulation of an exhaustive description incorporating these themes, (6) production of the essential structure of the phenomena and (7) verification of the exhaustive description and essential structure.

Because the study was conducted in two countries, the same procedure was carried out in parallel, but with constant moments of intersection, exchange of information and analysis involving the two MRs and a team member, but ensuring the analyses respected each cultural context.

In line with Colaizzi's (1978) method outlined above, before starting the analysis, the researchers read through the interviews several times in order to make sense of the whole and to familiarise themselves with the data. In these readings, key words or concepts were identified that were deemed relevant to the phenomena under investigation. The key words were underlined and the textual quotations that confirmed notable ideas and concepts were marked. These were grouped into units of meaning, which in turn were coded or labelled. The coded units were grouped into subthemes of ethical conflict and moral problematic, and these, in turn, were grouped into themes. The analysis proceeded until a satisfactory description of the phenomena under investigation was reached. Any discrepancies between interpretation and coding were resolved by involving another researcher. Microsoft® Word, Excel and PowerPoint were used to file the transcripts, the analytical work and the field diaries.

3.5 | Rigour

Quality and rigour criteria were applied in accordance with validations of the authenticity and reliability of the analysis conducted. Thus, reliability was guaranteed in terms of the study's credibility, transferability, dependability and confirmability (Guba & Lincoln, 2000), as well as in keeping with the critical appraisal tools for qualitative research developed by the Joanna Briggs Institute (Lockwood et al., 2015). Credibility was ensured by triangulation between researchers and by seeking the validation of the content of each interview from individual informants, as required by step seven in Colaizzi's framework. Data analysis and interpretation were likewise undertaken by triangulation between researchers in joint sessions in which views were shared and consensuses regarding inferences made were reached. During the analysis itself, measures were taken to ensure that the proximity of MR (AFP, LB) to the phenomenon did not lead to interpretive bias. This was achieved via the critical and rigorous use of the team's knowledge and experience concerning ethical conflicts in ICUs.

Transferability was ensured by the exhaustive description of the study contexts. To ensure dependability or consistency, the sample, data collection and analysis were appropriately described. Finally, confirmability was ensured by the recording and subsequent transcription and review of the interviews. For publication, we adhered at all times to the consolidated criteria for reporting qualitative research (COREQ) guidelines (Tong et al., 2007).

3.6 | Ethical considerations

The research team adhered strictly to the directives of the Declaration of Helsinki at all stages of this study. The research received favourable reports from the Ethics Committees of the hospitals involved and authorisations from their respective managements, as well as favourable reports from the Bioethics Commissions of the University of Barcelona (IRB 00003099) and from hospital (ASST Santi Paolo e Carlo and ASST Fatebenefratelli Sacco). Signed informed consent was obtained from all participants agreeing to the fact that their interview would be recorded on video for transcription and subsequent analysis. A fictitious name was assigned to each participant and clearly indicated on each recording but not included on the informed consent document. To avoid repetition of names, lists of 20 common male and female names were drawn up for each country. To ensure confidentiality of data, the informed consent documents were kept under lock and key in the offices of the MRs in each country. Furthermore, all recordings and transcriptions were deposited in a SharePoint folder at the University of Barcelona, in accordance with prevailing regulations on data protection and the enforcement of digital rights. The code assigned to each participant was alphanumeric and corresponded to his or her profession, age, sex, years of professional experience, city, date of interview, interviewer code and assigned alias.

4 | FINDINGS

Of the 38 participants, 25 were nursing professionals and 13 were medical professionals. Twenty were female and 18 male with a mean age of 38.2 (23–62). The remaining sociodemographic data are provided in Table 2.

Our analysis identified two main themes: namely, the approach to end of life in exceptional circumstances and the lack of humanisation and care resources. An additional five subthemes also emerged from the analysis (see Figure 1).

4.1 | Approach to end of life in exceptional circumstances

End of life was identified as a common theme in the professionals' responses. This main theme comprised two other subthemes: (1) End-of-life care and (2) Withholding and withdrawal of life-sustaining treatment.

4.1.1 | End-of-life care

The solitude of patients on admission, in a context of great uncertainty and the possibility of their dying alone were major sources of ethical conflict for nurses and physicians alike in both countries, especially during the first wave of the pandemic.

TABLE 2 Characteristics of the sample and time spent on interviews.

Number	Alias code	Gender	Age	Profession	City	Time interviews
1	CRISTINA_N_23_BCN	F	23	Nurse	Barcelona	33.36
2	CLAUDIA_N_23_BCN	F	23	Nurse	Barcelona	18.46
3	ÁNGELA_N_24_BCN	F	24	Nurse	Barcelona	29.07
4	LUCÍA_N_28_BCN	F	28	Nurse	Barcelona	44.41
5	CARMEN_N_28_BCN	F	28	Nurse	Barcelona	20.00
6	ÉRICA_N_29_BCN	F	29	Nurse	Barcelona	22.46
7	ORIOL_N_35_BCN	M	35	Nurse	Barcelona	26.33
8	SUSANA_N_44_BCN	F	44	Nurse	Barcelona	17.16
9	MAR_N_46_BCN	F	46	Nurse	Barcelona	17.03
10	SANTIAGO_P_30_BCN	M	30	Physician	Barcelona	25.03
11	TONI_P_44_BCN	M	44	Physician	Barcelona	35.44
12	SOFÍA_P_30_BCN	F	30	Physician	Barcelona	19.14
13	RAÚL_N_50_BCN	M	50	Nurse	Barcelona	31.29
14	JOSEFA_N_26_BCN	M	26	Nurse	Barcelona	34.59
15	JUANA_N_27_BCN	F	27	Nurse	Barcelona	21.00
16	KAUFMAN_N_27_BCN	M	27	Nurse	Barcelona	25.51
17	CARLA_N_30_BCN	F	30	Nurse	Barcelona	37.23
18	DIEGO_P_41_BCN	M	41	Physician	Barcelona	29.63
19	PAU_N_32_BCN	M	32	Nurse	Barcelona	26.46
20	VICTOR_P_42_BCN	M	42	Physician	Barcelona	49.24
21	MÓNICA_N_26_BCN	F	26	Nurse	Barcelona	35.26
22	NEUS_N_55_BCN	F	55	Nurse	Barcelona	46.53
23	CATERINA_P_32_MIL	F	32	Physician	Milano	20.07
24	ALICE_P_57_MIL	F	57	Physician	Milano	49.28
25	GIANLUCA_P_56_MIL	M	56	Physician	Milano	47.22
26	DANIELE_P_44_MIL	M	44	Physician	Milano	27.39
27	LUIGINA_P_44_MIL	F	44	Physician	Milano	33.56
28	NICOLA_P_40_MIL	M	40	Physician	Milano	26.30
29	GIACOMO_P_62_MIL	M	62	Physician	Milano	34.43
30	MAURO_P_58_MIL	M	58	Physician	Milano	31.37
31	ELEONORA_N_28_MIL	F	28	Nurse	Milano	28.20
32	GABRIELE_N_57_MIL	M	57	Nurse	Milano	36.40
33	AZZURRA_N_56_MIL	F	56	Nurse	Milano	25.25
34	ALESSANDRO_N_52_MIL	M	52	Nurse	Milano	58.14
35	AGOSTINO_N_37_MIL	M	37	Nurse	Milano	26.14
36	FABRIZIA_N_33_MIL	F	33	Nurse	Milano	29.26
37	MARCO_N_32_MIL	M	32	Nurse	Milano	26.26
38	MICHELA_N_26_MIL	F	26	Nurse	Milano	46.18

Abbreviations: F, female; M, male.

Shortages of personal protective equipment (PPE) in the first wave and the prohibition on, or restriction of, hospital visits to prevent the spread of the virus caused the informants to suffer both emotionally and ethically. Many came to question whether their duty to protect family members from exposure to infection justified their not allowing them to be at the bedside in the patients' last moments of life. In several cases, critically ill patients were informed they were to be intubated, knowing they might not wake up again and, as such, were potentially being deprived of a last chance to talk with their loved ones:

> First of all, the fact that patients were dying alone, without the comfort of their families, because during the first wave, which lasted almost a year, access

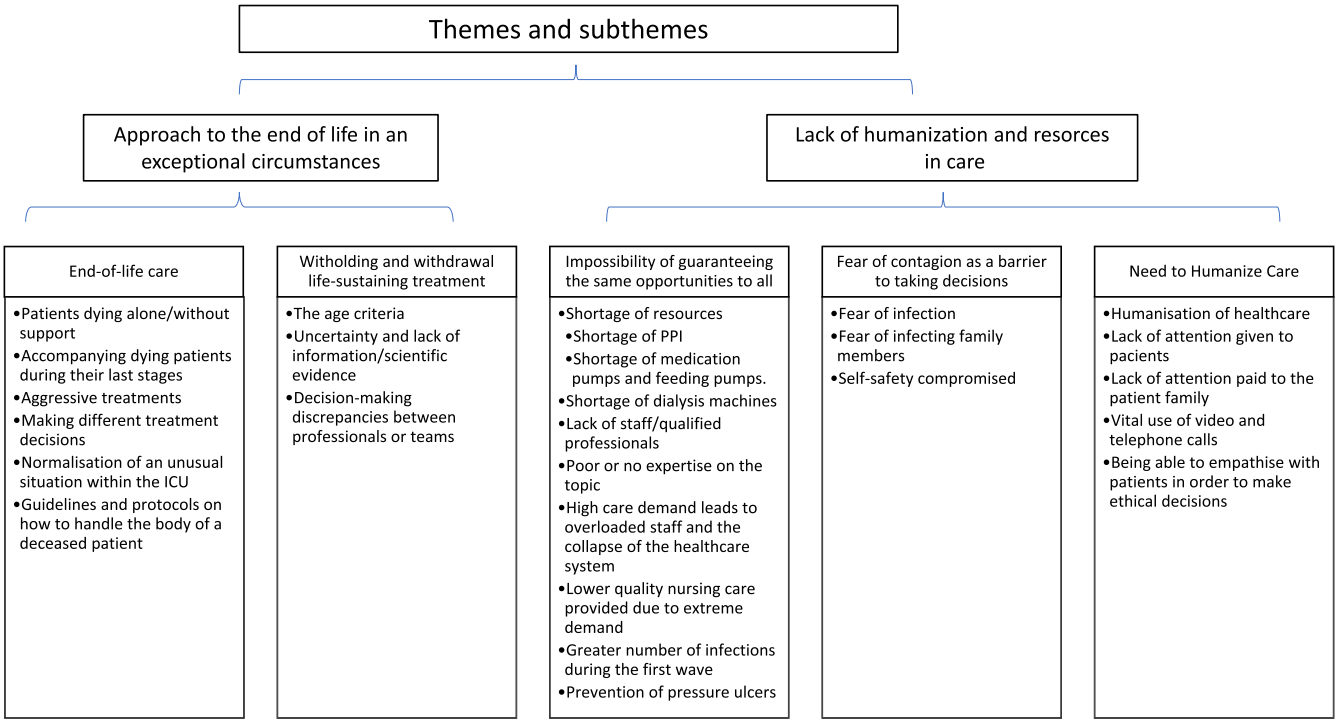

FIGURE 1 Themes and subthemes emerged in the analysis of data.

> to family members was not allowed and this was a very, very important problem we experienced, as professionals
>
> GABRIELE_N_57_MIL.

> Many were crying, they wanted to talk to their relatives, thus creating, among other things, a brand-new type of conflict, that is, the impossibility of letting these patients talk to and be in touch with their relatives
>
> MAURO_P_58_MIL.

Additionally, having to be at the bedside of the dying patient presented itself as an unusual situation for the ICU professionals. The healthcare professionals in Barcelona explain that, in view of what had happened during the first wave, they requested that the hospital's management grant permission for a family member to accompany the patient at the end of life. However, in Italy this proved impossible as the restrictions on hospital visits remained in place during both the first and second waves.

> ...above all, patients who are in a very, very serious condition and are about to die, ...at least to say goodbye, let the family come to the hospital... But speaking for myself, saying goodbye to a loved one, I think is an act that has to do with humanity, not with medicine
>
> SANTIAGO_ P_30_BCN.

> ...patients who were agonizing, they would let in a family member so that they could say goodbye to them. At least in that stage, it was possible. Otherwise, we tried to stay with the patient
>
> CARMEN_ N_28_BCN.

Some of the Spanish nurses report that, during the first wave, when scientific evidence on the efficacy of treatments was still scarce, the care provided was not of the highest standards due to uncertainty and the fear of failure in a period marked by unusually high mortality rates in ICUs.

> ...with all the machines on, medication at top doses, we were aware they were intubated, and that their families were not notified. And we thought, if this goes on, I mean, they're getting worse and worse (...) and their family are not going to get here on time. And you have to tell the family in the middle of the morning that they have to say goodbye to their husband, in this case, lying down, in conditions that I wouldn't... I think had it been my father or my partner, what a terrible last moment. What a bad memory. And that case affected me very much. I mean, the way of dying, in itself (...) I mean, a death with dignity was not possible... well, it was handled very badly. I think that also, perhaps, because of the doctors' frustration, I mean, I talked to them and they told me: 'in the future we don't want anybody telling us that we didn't try

> everything'. And I said: 'but to what extent is it justified to say *we tried everything* when someone has to die this way?' I always thought, 'I hope I don't end up like this, because it's horrible'
>
> JUANA_N_27_BCN.

Frequent changes in therapeutic strategy meant physicians were in daily contact with the medical coordinators and communicating with them constantly. Moreover, the respondents reported having to deal with frequent changes in the shift schedules of their medical teams. This lack of consistency in scheduling was notable during the first wave, especially as because new critical care units were being opened up to treat escalating numbers of COVID-19 patients. In some instances, these changes were not fully understood by the nursing team.

> … speaking for myself what affected me the most was that, as the medical shifts changed, the decisions regarding patients changed (…) Patients with whom I had been struggling for weeks, even a month. (…) Suddenly a new shift was set up and that patient situation approach was like…. 'there's nothing else to do, leave it', and you were like…. You didn't understand why, do you know what I mean? Because it wasn't really… that the situation would have gotten worse, but sometimes there weren't any beds available, so they needed to streamline the ICU and you found yourself there fighting along with the patient for a while
>
> JOSEFA_N_26_BCN.

> Yes, apart from the fact that it was so complex, every day or every two days the treatment protocols were changing, you know what I mean? So, as I said, everything was so inconsistent. Before, things were done one way, then a week later things changed. So, it was a bit of a feeling of what are we…? It seems that this disease is overwhelming us all
>
> TONI_P_44_BCN.

In addition, in the Italian sample, a number of nurses expressed their shock at having to provide post-mortem care, something that is usually the responsibility of morgue personnel.

> (…) Trust me, we are maniacally committed to this, we showed the body to the relatives in the most decent way possible. Instead, this was no longer being done, because we were told to leave all the patient's aids, to wrap them in this bag, which is hermetically closed with a zipper, and to chlorinate the body
>
> GABRIELE_ N_57_MIL.

4.1.2 | Withholding and withdrawal of life-sustaining treatment

The shortage of beds in the ICUs, age as a determinant of admission, and the general uncertainty due to the lack of information and scientific evidence during the first wave are three aspects that emerged of this subtheme in relation to limitations on the life-support treatment provided to COVID-19 patients. The healthcare professionals reported that age should not have constituted a static criterion for being given a bed in the ICUs, and, while they recognise the gravity of the circumstances, they feel assessment of patients should have continued to be based on associated comorbidity and the specific nature of each case. Thus, various respondents spoke of the ethical conflict originated by the fact of having to limit life-support treatment in some very severe cases with little chance of survival, in order to free up beds for other admissions:

> Especially in March, the disproportion between bed availability and the request for hospitalization was a challenging conflict; paradoxically, even when we were partially justified by the SIAARTI document they sent to all of us, and that was probably a kind of protective measure, saying that 'if beyond a prefixed age, you are almost authorized or in any case justified for this pathology'; [we were not supposed] not to treat, because in the end we can also cure off the ward, not only on it, but it's been difficult to deal with 'do not admit to the intensive care unit'…"
>
> LUIGINA_P_44_MIL.

> The biggest ethical conflict that has arisen, in my opinion, is the age. The fact that you couldn't accept any more patients in the ICU that at the time were over 65 years of age because they were no longer candidates for ICU. So that was like, like having patients who needed ICU but because they were 66 years old, they were no longer candidates. And then, the fact of dying alone, ethically…well damn…
>
> KAUFMAN_N_27_BCN.

When exploring accountability for decision-making, the participants tend to hold a physician associate or head physician accountable. Interestingly, most physicians, when discussing how they proceeded in deciding the therapeutic pathway for a COVID-19 patient, included only their physician colleagues when referring to the medical team. However, the nurses interviewed included both nurses and physicians when they referred to the medical team. Some of the nurses also pointed out that due to the massive pressure on their services during the first wave, it proved impossible to schedule the normal cross-functional meetings.

It emerged that some of the new ICUs created to meet patient demand were led by non-specialists in critical care. Some of the Spanish nurses reported, especially with regards to anaesthetists, discrepancies regarding the prescription of activities related to improving patient ventilatory function, including pronation/supination, and intubation support and removal. All these measures required almost the exclusive dedication of nursing staff but this meant other patients were at times neglected while a shortage of PPE exposed both parties to greater risks.

> Yes, there were confrontations because, for example, they told you… There was a doctor who told you 'when you start, you do such and such', and others told you I 'need you for this'. 'No, you have to understand I don't have the resources, I'm not going here just for this. In two hours, when I start my shift, and after finishing with medication I'll do as you ask. But not right now'. And we had these types of fights
>
> ERICA_N_29_BCN.

4.2 | Lack of humanisation and resources in care

This theme can be broken down into three subthemes: (1) Impossibility of guaranteeing the same opportunities to all; (2) Fear of contagion as a barrier to taking decisions; (3) Need to humanise care.

4.2.1 | Impossibility of guaranteeing the same opportunities to all

Another major source of ethical conflict for the healthcare workers was the realisation that they were unable to guarantee the usual quality of care and equal opportunities for all patients.

> Not having had the chance to provide everyone with the same treatment. Although we worked to the maximum of our possibilities, it was clear that we couldn't give everyone the same chances
>
> FABRIZIA_N_33_MIL.

> By finding the right balance between what you could actually provide and guaranteeing [that service to] a much higher number of people, this is another ethical aspect not to be overlooked. I may have the magic pill but I have just three pills, so the problem is who to give them to. In my opinion, the take home message is, as in every mega emergency, you rescue those who have a chance of making it and focus on the greatest number of people you can rescue…
>
> ALICE_P_57_MIL.

> Yes, during the first wave, also because at a certain point we ended up doing things passively, so we were just accepting decisions that were necessarily taken in order to guarantee adequate assistance to everyone, it was almost – I apologize for the term – a kind of disaster medicine, whoever had the best chance was most likely to get out of it
>
> AZZURRA_N_56_MIL.

The respondents attributed this situation to several factors, but first and foremost, to the lack of material resources, including PPE, continuous infusion pumps for medication and nutrition, dialysis machines and products for the prevention and treatment of pressure injuries. A second factor was the lack of qualified professionals in critical patient care. This meant the new wards opened to meet increasing demands were sometimes managed by groups without an ICU physician or a critical care nurse that could oversee those nurses not specialised in ICUs. While new ICU units were a welcome addition, that fact that it led to the break-up of established ICU teams was also criticised.

> The first (wave) was indeed devastating given the fact that we couldn't provide care, it was frustrating… you asked for Mepentol® and there was none. It was like, oh my God, something so basic! The first wave was just like that, basic drugs that weren't available and a lack of PPE
>
> ANGELA_N_24_BCN.

> The first occasion was the need to give indications to colleagues and collaborators on the use of scarce resources, so when, as defined by disaster medicine, when demand exceeds the maximum possibility of providing care, and all available resources have been mobilized, so after having involved every physician, nurse, every ventilator, all the intensive care, and there is no room for everyone, what do you do?
>
> DANIELE_P_44_MIL.

A third source of conflict was the general ignorance about the virus, which meant treatments were being constantly changed during the first wave.

> We have had as a scientific society, SIAARTI together with ANIARTI and other societies, the responsibility of issuing ambiguous documents, which were addressed to some colleagues but were actually affecting the whole society, so we became definitely aware that the first lockdown was necessary right after the anesthesiologists unequivocally communicated that it was an unknown, unpredictable and overwhelming situation
>
> DANIELE_P_44_MIL.

TABLE 3 List of care affected during the first wave of pandemic, reported by Barcelona nurses.

	Care/interventions/treatments	Participant alias
Humanisation of patient and their family attention	Loss of humanised care	SUSANA_N_44_BCN PAU_N_32_BCN
	No individualised care	MAR_N_46_BCN SUSANA_N_44_BCN
	No incorporation of patient opinion during the decision-making process	MAR_N_46_ BCN
	Unable to incorporate family in the decision-making process/No time to inform them	MAR_N_46_BCN ORIOL_N_35_BCN PAU_N_32 BCN
	No accompaniment of patients coming to the end of their lives	RAÚL_N_50_BCN PAU_N_32_BCN
Security and patient attention	Unable to care critically ill patients	RAÚL_N_50_BCN MAR_N_46_BCN
	Impossibility of entering to patient bedroom to check their clinical situation	ANGELA_N_24_BCN RAÚL_N_50_BCN SUSANA_N_44_BCN ORIOL_N_35_BCN
	Experimental care, exposure time limited	SUSANA_N_44_BCN
	Usage of material accumulated during years to ensure clinical attention (respirators, infusion pumps…)	SUSANA_N_44_BCN
	Administration of nebulized medication (it has been done during the first wave to protect health professionals)	ANGELA_N_24_BCN CARMEN_N_28_BCN
	Intra-venous medication preparation because it was presented in vials and professionals spend more time on preparing it	CARLA_N_30_BCN
Infection control	Lack of preventive infection control measures	LUCIA_N_28_BCN CARMEN_N_28_BCN
	No oral hygiene	CARMEN_N_28_BCN ERICA_N_29_BCN CARLA_N_30_BCN SUSANA_N_44_BCN
	No patient daily hygiene	CLAUDIA_N_23_BCN LUCIA_N_28_BCN CARMEN_N_28_BCN
	Working on tasks increased the infections caused by Klebsiella, pseudomonas and yest/No zero bacteriemia.	CRISTINA_N_23_BCN LUCIA_N_28_BCN CARLA_N_30_BCN
Intubated patient care	To extubate patients without ensuring the correct application of the procedure	CRISTINA_N_23_BCN
	To prone and supine patients resulted in nursing overload of work/Lack of time	CRISTINA_N_23_BCN LUCIA_N_28_BCN CARMEN_N_28_BCN
Posture changes and prevention of pressure skin lesions	Lack of time to carry out preventive posture and therapeutic changes	CARLA_N_30_BCN
	Hyperoxygenated fatty acids to prevent pressure skin lesions	LUCIA_N_28_BCN
	Lack of time to collocate patients in anti-oedema position due to the lack of personal protective equipments	ANGELA_N_24_BCN LUCIA_N_28_BCN
	No posture changes to prevent pressure skin lesions due to the lack of personal protective equipments	ANGELA_N_24_BCN JOSEFA_N_26_BCN LUCIA_N_28_BCN CARMEN_N_28_BCN ERICA_N_29_BCN SUSANA_N_44_BCN
	Continued physical stress because care should be done without professional help	ANGELA_N_24_BCN
Nutrition care	To assess patient nutrition	LUCIA_N_28_BCN
Nursing leadership and teamwork dynamics	Loss of control in management care	MAR_N_46_BCN
	Self-care to be able to care to patients	RAÚL_N_50_BCN
	No interdisciplinary meetings due to the lack of time	SUSANA_N_44_BCN

Fourthly, a number of the respondents spoke of a system overload attributable to high demand which left the hospitals totally overwhelmed. Some even compared the situation to that of working in a field hospital in the middle of a war.

Fifth, there was considerable agreement in the nurses' testimonies attesting to a drop in the quality of nursing care because of the extreme nature of this demand. Specific care was required for large numbers of highly dependent patients, which included the care associated with mechanical ventilation and ECMO, pronation and supination to improve oxygen saturation, mobilisation for the prevention of pressure injuries, as well as the management and control of mechanical ventilation removal. All of these were required in addition to the usual treatment provided to a dependent patient. Table 3 reports some of the interventions reported by the nurses in the Spanish sample that were affected during the first wave. These nursing interventions can be organised into seven groups: that is, humanisation of patient and family care; patient safety and care; infection control; intubated patient care; postural changes and prevention of pressure injuries; nutrition-related care; and nursing leadership and team dynamics.

> (…) at that time, the beds were from nursing homes, and didn't even have wheels, they were made of wood, the mattresses were not air mattresses, that is… Of course, we didn't have time to make the postural changes… Nothing, because at the slightest… I mean, you were there long enough… I remember doing rounds of five hours straight and even like that you didn't have time to be with the patient because you had to start administering medication, the doctors would tell you 'now it's time for this, now it's time for that, now this, now do this, now do that'. Patients bleed, had runny noses, they… Of course, you didn't have time to do basic or preventive things that critical care requires, those which I am used to doing, at least in my case
>
> LUCIA_N_28_BCN.

Finally, a sixth factor in this subtheme was the increase during the first wave of healthcare-associated infections. This can be attributed primarily to the fact that demand combined with a lack of resources meant work had to be organised by tasks and so the usual preventive measures implemented in ICUs could not be carried out. Moreover, the nurses spoke of increased workloads due to the shortage of qualified professionals. According to the informants, all these factors compromised their work and created situations of ethical conflict when they became aware that their duty to care for all patients equally—in this instance essentially COVID-19 patients, but also patients not infected with the virus—was being frustrated.

> At the end of the day, you were always there asking yourself if the work you had done was the best you could offer or if you could have improved something, and clearly the answer was you can always improve, but…
>
> ELEONORA_N_28_MIL.

> We were constantly under pressure, because the bed was freed but it was already assigned before it was freed, so before the patient was discharged that bed was already assigned to the next incoming patient who was admitted as soon as possible
>
> AZZURRA_N_56_MIL.

> (…) all transplants had to be put off during the first wave. So, considering that the greatest benefit of an intervention or a procedure is to admit the patient and improve their quality of life and lifespan, all of which was also completely put on hold during the first wave, which also meant, that patients who were not COVID patients, did not have access to intensive care units. Therefore, a lot of pathologies not related to the pandemic, well, were not treated
>
> DIEGO_P_41_BCN.

Although there is an apparent consensus regarding the factors that impeded all patients from enjoying equal opportunities, a number of respondents claimed that no distinct ethical paradigm emerged during the pandemic. Rather, what actually manifested itself was a form of 'ethical stress' induced by having to apply certain criteria of ethical decision-making on a daily basis.

> A typical situation is when it was necessary to make decisions about the possibility of some patients, about the suitability of continuing their treatments. Back when no one would have imagined all of that, before the COVID era, the huge number of patients for whom therapy had been discontinued or were not suitable for intensive care, this number was very high; so, in my opinion, the ethical conflict is more like an ethical stress, something we experience every day, which we simply had to apply on a large scale
>
> MAURO_P_58_MIL.

4.2.2 | Fear of contagion as a barrier to taking decisions

Fear of the virus and of death was a constant factor in the genesis of ethical conflict, but also of psychological stress, especially during the first and second waves and before the administration of the first vaccines. Self-safety was compromised by the duty to care for others. Fear not only arose among these healthcare professionals of becoming infected, but also of infecting their family members and

placing them in a situation, that at the outbreak of the pandemic, was terrifying because mortality rates were so high. Some healthcare workers reported moving into empty apartments or isolating themselves in their rooms when they went home to rest, despite taking all recommended measures of hygiene, including showering at work and then again at home.

> Always. Always, always. Especially of the unknown. The fear is still here. In fact, now we see the virus is affecting younger people. Earlier, during the first wave, it seemed to be affecting more people who were between the sixth and seventh decade of their lives, and now it is more around the fourth, third decade of life. It's young people, people without a clinical history, without underlying diseases, even in good shape. So, you know, that always generates fear, uneasiness
>
> SANTIAGO_ P_30_BCN.

> Also, your family asked you about the situation, and you were trying to balance the words to avoid scaremongering and not to overstate the situation, so let's say we faced ethical dilemmas both at home and at work
>
> ELEONORA_N_28_MIL.

4.2.3 | Need to humanise care

Faced by the urgent and unprecedented restrictions imposed by the pandemic, the nurses sought to raise the alarm about the consequences of patient isolation and how patients were suffering more from not being able to talk, or to be close, to their loved ones, at a time when the fear of death was ever-present. From our analysis of the experiences of the professionals interviewed, the following aspects of this specific subtheme emerged: the importance of humanisation in health care; the lack of attention given to patients and the almost complete lack of attention paid to their family members; the vital use of video or telephone calls; and, being able to empathise with the patient when making decisions. The healthcare professionals agree that, despite providing patients with the technical resources (i.e. machinery, tests and treatments) to help them face the complications associated with COVID-19, the basic need to humanise care and for patients not to be isolated but to have their relatives at their side were issues that were not properly addressed. Moreover, the patients' psychological suffering and fear were shared by family members, who could only follow, via phone or video calls, the evolution of those admitted.

> So, maybe they stood more on the logical side, like more on the… yes, more on the logical side, saying 'it's not possible because we are in a pandemic and everything must be restricted and so on'. And we saw it more on the human side, saying 'damn, maybe it's not all about giving a pill or pronating or… maybe it's also about playing music or letting the family come over and hold their hand'. So regarding that, we certainly had disputes
>
> LUCIA_N_28_BCN.

> Those who were conscious – some of them – had the chance to use their cell phones and they did talk to their relatives. But there were also sedated patients and we were responsible for giving our reports in the afternoon. Doctors gave the medical report and we gave our nursing report. I tried to call their relatives every day, even if we just had a quick chat. I remember one family member in particular who had been painting the house and we were talking about that. Because I certainly wanted to avoid the bad news a little bit. And I was trying my best. But on the days that I couldn't call, I felt really bad for not having informed or called them that day
>
> CARMEN_N_28_BCN.

> Certainly, tablets and smartphones have played a fundamental role in decreasing the very dangerous social disintegration that revolved around the problems related to the pandemic
>
> DANIELE_ P_44_MIL.

5 | DISCUSSION

During the first wave of the pandemic, ethical conflict and decision-making were influenced above all by the lack of materials—most notably PPE and respirators—and a shortage of resources - primarily beds and critical care professionals with ICU training. Later, once the lack of material had been adequately addressed, decision-making was conditioned by excessive workloads, which led to the physical, psychological and emotional fatigue of critical care workers.

In the early days of the pandemic, the prioritisation of medical criteria meant the side-lining of such ethical aspects as guaranteeing the company of the loved ones of COVID patients at the end of life and a failure to provide patient care and attention of the highest standards. Faggioni et al. (2021) report an evident tension between the usual model of patient-centred care and the ethical model of distributive justice present in health emergencies. This tension undoubtedly contributed to the moral suffering of professionals, who faced considerable obstacles to their efforts to involve the patient and family in the decision-making process (Falcó-Pegueroles et al., 2021; Joo & Liu, 2021; Maaskant et al., 2021; Moore et al., 2022; Muñoz-Quiles et al., 2022).

McKenna (2020) claims that that nurses had been discussing end-of-life care long before the outbreak of the COVID-19 pandemic, citing palliative nursing as an example. Yet, ICUs were conceived for patient survival. In previous pandemics, such as

MERS-CoV, studies reveal that nurses struggled with the ethical conflict of an evident patient-avoidance mentality in their efforts to dodge infection; however, during COVID-19, having to witness patients' loneliness at the time of death—as reported by several authors (Fernández-Castillo et al., 2020; Melnikov et al., 2022; Moore et al., 2022; Sezgin et al., 2021; Shin & Yoo, 2022)—is revealed as the main factor of ethical stress, given that it comes into conflict with a healthcare worker's responsibility to accompany their patients and to alleviate their suffering. Similarly, albeit to a lesser extent, was the suffering reported by some nurses during the first wave on having to provide post-mortem care—to-date an issue that has received little attention—and which raises the need to train professionals in these disciplines as part of their university education.

In line with the extant literature (Cabré & Casado, 2020; Haas et al., 2020; Herrero, 2020; Sezgin et al., 2021; Vergano et al., 2020), a shortage of essential resources forced governments and healthcare institutions to take decisions that the participants in our study considered drastic. Perceptions of an increasing failure to treat ICU patients to the highest standards during the first wave—typically related to the sense of inadequacy and frustration experienced by some physicians in light of escalating mortality rates—can also be related to perceptions of futile treatments documented by Villa et al. (2021). Undoubtedly, the lack of scientific evidence and the moral duty to 'try anything and everything' in the treatment of many patients are additional factors that made the circumstances of the pandemic unique. Similarly, the use of age as a criterion for not admitting patients to the ICU based on the idea of reserving more resources to care for patients with an, a priori, higher survival rate raised concerns among both ICU physicians and nurses. Indeed, Herrero (2020) concludes that discriminatory interventions based on age, even in times of crisis, are unjustifiable, except in those patients with clearly defined comorbidities or terminal chronic diseases. Similarly, Vicent and Creteur (2020) prioritise life expectancy over age when deciding whether or not to admit patients to an ICU in situations of acute resource shortage.

The participants in our study stressed the importance of teamwork and collaboration between ICU professionals—in line, that is, with previous studies, for example Moore et al. (2022), Saeideh et al. (2022) and Zhang et al. (2022); however, they recognised that at times disagreements existed regarding such practices as the initiation or withdrawal of treatment. Such discrepancies transcend the domain of ethical responsibility and extend beyond the professional competence of ICU workers. Yet, it is evident that decision-making related to the adequacy of life support and other treatments as assumed by a physician should explicitly consider the execution or implementation of such decisions as assumed by the team of nurses. At a legal level, the ultimate decision-maker for withdrawing or not initiating treatment is the senior clinician, although the Royal College of Nursing notes that nurses with appropriate levels of training, skills and support can be the senior responsible clinician (McKenna, 2020; Royal College of Nursing, 2020). However, such decisions should not fall solely on one person but rather should be made as a team, applying ethical decision-making models and drawing on the best available evidence, on the understanding that the process needs to include both the professionals ultimately responsible for a decision and those who will execute them. As Faggioni et al. (2021) stress, every decision in clinical practice, even in emergency situations, has not only medical but also ethical implications. Likewise, Squires et al. (2022) identify the importance of team bonding in such situations, presenting evidence to the effect that teamwork improves care; and the need for humility and respect between the different disciplines, as positive aspects of teamwork during the first wave.

Our results also stressed that the impossibility of guaranteeing the same therapeutic opportunities to all patients was a major source of ethical conflict as this greatly compromised the principle of equity. Shortages of material resources of all kinds and the lack of qualified professionals further accentuated the saturation of services, but above all professionals found themselves unable to exercise their ethical responsibility to treat patients, thereby giving rise to moral dilemmas (Melnikov et al., 2022) and moral distress (Maben et al., 2022; Moore et al., 2022; Villa et al., 2021). In the case of the nurses, the obstacles faced in their efforts to provide good ICU during the first wave led to an increase in patient infections and pressure ulcers. Basic care, including ventilation support, nutrition, injury prevention and safety were affected, while nursing leadership was greatly challenged during this wave. However, despite the challenges faced during the pandemic, none of the healthcare workers interviewed—in line with findings reported by Maben et al. (2022) and Saeideh et al. (2022)—indicated a desire to abandon their profession. On the contrary, the ethical imperative of their duty to provide care, in the case of the nurses, and to provide treatment, in the case of the physicians, was made manifest. Both groups of professionals claimed to be aware of the gravity of the situation, but the fact that there were no guidelines or defined care circuits on how to act served to aggravate the moral issues they faced. In some specific cases, the same ethical precepts and moral duties were applied but no consideration was given to implementing an explicit patient prioritisation, as recommended by Vicent and Creteur (2020). Had such a system been in place, then this in all probability could have reduced the degree of ethical conflict and, in particular, the moral distress suffered by the ICU professionals. Thus, to face future epidemics or catastrophes, healthcare workers need to be prepared for exceptional situations by providing them not only with a good grounding in the ethics of the profession and the principles of bioethics, but also with the skills to make decisions in extreme situations, such as pandemics, natural disasters and wars.

The fear of being infected or infecting others was constant among healthcare workers during the first wave—that is, when medical evidence was poor and mortality was high—and continued to be so until the appearance of the first vaccines (for further reports of this, see, Moore et al., 2022; Sezgin et al., 2021; Zhang et al., 2022). Ethical conflict was triggered when the need for healthcare workers to protect themselves clashed with their patients' needs for urgent care and their duty to prevent others from becoming infected (Falcó-Pegueroles et al., 2021).

Our interviews also highlighted a demand from both professions and countries to recognise the need to further humanise care and attention, especially in times of crisis. Moreover, the consensus is—in line with Fernández-Castillo et al. (2020)—that this concern is of equal, if not greater, importance than promoting the technological resources of the ICU. The imperative that the patient and family members should be involved in decisions about treatments, procedures and care was hampered by the very restrictions imposed during the pandemic. When a patient is admitted to an ICU, his or her family inevitably experience bouts of worry, anxiety and fear. During the COVID-19 pandemic, communication via video went some way to ensuring that patients could maintain contact with their relatives, although, as Maaskant et al. (2021) report, there were barriers related to a lack of familiarity, on the part of patients and professionals alike, with these technologies and of specific skills for communicating clinical information. A further issue here was the potential violation of rights related to data privacy in the case of some patients.

In short, the current study presents insights not previously provided by qualitative studies conducted in relation to the pandemic (e.g. Fernández-Castillo et al., 2020; Muñoz-Quiles et al., 2022). These can be summarised as the fact that both nurses and physicians identified as potential sources of ethical conflict end-of-life management, the adequacy of life-support treatment, the lack of resources that gave rise to inequitable delivery of care, the fear of contagion and the need to ensure the humanisation of care even in the midst of a pandemic such as that caused by SARS-CoV-2 infection. Undoubtedly, an awareness of these sources of ethical conflict enables us to propose preventive or protective measures, aimed at those professionals that serve on the frontline and who have the responsibility of responding to challenges of this magnitude.

5.1 | Study strengths and limitations

The present study presents data from a sizeable sample of subjects who, in addition to meeting a series of heterogeneity criteria, represent two professions (ICU nurses and physicians) working in two different cultural contexts. The fact that we were able to conduct interviews with these subjects by videoconference and could guarantee their data protection, meant the conditions created favoured the free expression of feelings, opinions and experiences. Moreover, these data were collected and analysed free of the influence of the opinions or the preconceived ideas of the researchers. The type of patient and family cared for are likely to differ from one hospital facility to another, as are the internal protocols in place for the comprehensive care of critically ill patients. This possibility was addressed by the parallel analysis of the interviews by the two MRs (in Barcelona and in Milan). Not being able to conduct the interviews face-to-face could have resulted in less non-verbal communication, which may have impacted interpretations of the findings. Here, the subsequent visualisation of all the interviews to contrast the information recorded in the interviewers' field diaries with the interviewees' recorded non-verbal communication helped mitigate this risk. The recordings of all participants were translated into the other language (i.e. Spanish or Italian) of this study. Even so, the MRs viewed all interviews in the original language to capture, highlight or emphasise gestures, pauses or other non-verbal information not documented in the field diary, which accompanied the text.

5.2 | Recommendations for further research

New studies, employing both qualitative and quantitative research methods, are required to analyse strategies or mechanisms that can ensure professionals are protected from potential ethical conflicts, especially in times of sanitary crisis. Further research, which can inform education for the healthcare professions, is recommended on end-of-life and post-mortem care, effective communication techniques via video calls, disclosure of bad news and bioethical models for decision-making in highly demanding situations of great uncertainty, such as those associated with pandemics.

6 | CONCLUSION

During the COVID-19 pandemic, ICU nurses and physicians were exposed to unprecedented levels of ethical conflict in the workplace. During the first wave, the decision-making of these healthcare workers was influenced by shortages of both resources and professionals with the requisite ICU training, while in the second and subsequent waves, decision-making was conditioned by excessive workloads and by the physical, psychological and emotional fatigue accumulated by these professionals.

The specific sources of ethical conflict faced by nursing and medical professionals in the ICUs of Spain and Italy have been identified as the approaches taken to end-of-life situations in these exceptional circumstances and the lack of humanisation and critical care resources. The professionals sought to take their decisions in line with professional ethics and bioethical principles, but, nevertheless, they experienced moral dilemmas and moral distress when not being able to care for, or to treat, their patients as they believed fit.

The need to implement preventive measures of ethical conflict in situations of epidemic or catastrophe is more than apparent. Such measures might usefully include the education of ICU professionals in end-of-life and post-mortem care, effective communication techniques via video calls, communication of complex diagnoses and bad news, and bioethical models for decision-making in highly demanding situations of uncertainty, such as those experienced during the COVID-19 pandemic.

RELEVANCE TO CLINICAL PRACTICE

Identification of the emerging themes and subthemes responsible for the ethical conflicts experienced by those professionals that cared for critically ill patients in the various waves of the COVID-19

pandemic facilitates the design of specific strategies to reduce exposure to such conflict and prevent the sequelae to which repeated exposure gives rise. Although these results have been studied in the specific context of the COVID-19 pandemic, they might be extrapolated to future health crises in which the health system is placed under great stress and an effective professional and organisational response is required.

ACKNOWLEDGEMENTS

Thanks to all the participants, nurses and physicians from Milan and Barcelona who gave us their time to explain their experiences and ethical values. Thanks to the participating facilities that authorised the data collection and the technical support offered by the Research Office and the IT Department of the Faculty of Medicine and Health Sciences (Bellvitge Campus) of the University of Barcelona. Finally, we would like to thank the Víctor Grífols Lucas Foundation for the grant that allowed us to conduct this research.

FUNDING INFORMATION

This study was awarded a Bioethics Research Grant from the Víctor Grífols y Lucas Foundation for 5.000 euros, from a competitive initiative in 2020.

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 on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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SUPPORTING INFORMATION

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

How to cite this article: Falcó-Pegueroles, A., Bosch-Alcaraz, A., Terzoni, S., Fanari, F., Viola, E., Via-Clavero, G., Hoyo, S.-D., Parini, A. M., Poveda-Moral, S., Parozzi, M., Guàrdia-Olmos, J., & Bonetti, L. (2023). COVID-19 pandemic experiences, ethical conflict and decision-making process in critical care professionals (Quali-Ethics-COVID-19 research part 1): An international qualitative study. *Journal of Clinical Nursing*, *00*, 1–16. https://doi.org/10.1111/jocn.16633