ORIGINAL ARTICLE

WILEY

Nurses' experiences of being recruited and transferred to a new sub-intensive care unit devoted to COVID-19 patients

Matteo Danielis RN, MNS, PhD, Nurse Educator[1,2] (iD) |
Luca Peressoni RN, MNS, Head Nurse[2] | Tommaso Piani RN, MNS, Head Nurse[2] |
Tiziana Colaetta RN, Head Nurse[2] | Maura Mesaglio RN, MNS Director[2] |
Elisa Mattiussi RN, MNS, Nurse Educator[1,2] | Alvisa Palese RN, MNS, PhD, Associate Professor[1] (iD)

[1]School of Nursing, Udine University, Udine, Italy

[2]Udine University Hospital, Azienda Sanitaria Universitaria Friuli Centrale, Udine, Italy

Correspondence
Matteo Danielis, Department of Medical Sciences, University of Udine, Italy, Viale Ungheria 20 – 33010 Udine, Italy.

Abstract

Aim: To describe the experiences of Italian nurses who have been urgently and compulsorily allocated to a newly established COVID-19 sub-intensive care unit.

Background: In the context of the COVID-19 pandemic, no studies have documented the experience of nurses urgently reallocated to a newly created unit.

Method: A qualitative descriptive study. Twenty-four nurses working in a sub-intensive care unit created for COVID-19 patients participated in four focus groups. Audio-recorded interviews were verbatim-transcribed; then, a thematic analysis was performed.

Results: The experience of nurses was summarized along three lines: (a) 'becoming a frontline nurse', (b) 'living a double-faced professional experience' and (c) 'advancing in nursing practice'.

Conclusions: Nurses who experienced being mandatorily recruited and urgently reallocated to a COVID-19 unit lived through a mix of negative feelings in the early stages, a double-faced situation during the episode and, at the end, the perception of global growth as a person, as a team and as a professional.

Implication for nursing management: Nurse managers could play a key role in identifying and preparing nurses in advance to mitigate their concerns and their sense of unpreparedness. The value attributed to nursing care should be promoted both during and after the current COVID-19 pandemic.

KEYWORDS
COVID-19, coronavirus outbreak, pandemics, nurses' experiences, recruitment, qualitative research

1 | INTRODUCTION

The SARS-CoV-2 virus, responsible for the consequent infection named COVID-19, has caused 66,422,058 cases and 1,532,418 deaths in over 250 countries as of 07 December 2020 (WHO, 2020). As early as January 2020, the World Health Organization defined COVID-19 as a viral respiratory disease with extensive and rapid infectiousness (The Lancet Infectious Disease, 2020). As the disease was confirmed to have human-to-human transmission (Liu & Liu, 2020), with a clinical presentation ranging from a mild upper respiratory tract infection to severe respiratory failure, a rapid increase in hospital capacity in terms of beds and units (e.g. a structural division

in COVID-19 and COVID-19-free areas) was immediately undertaken in the many affected countries, including Italy (Baggiani et al., 2020).

The COVID-19 pandemic in its first and second wave in Europe, causing nearly 105,000 deaths by November 2020 (WHO, 2020), has forced Italian hospitals to act according to three different strategies: caring for infected patients, protecting other hospitalized patients from being infected and preventing the spread of the disease among health care professionals. To prevent the health care system from collapsing and to urgently respond to the increasing numbers of COVID-19 patients, several reorganisation interventions have been implemented in a short time: the number of intensive care unit beds has been increased, elective surgical procedures have been cancelled, and new units have been established, while other units have been converted for COVID-19 patients (Danielis & Mattiussi, 2020; Lipsitch, Swerdlow, & Finelli, 2020; Mari, Crippa, Casciaro, & Maggioni, 2020; Rosenbaum, 2020). As a consequence, entire nurse groups have inevitably been relocated to new units (Bagnasco, Zanini, Hayter, Catania, & Sasso, 2020).

Nurse reallocation, named mandatory mobility, has been poorly studied and mainly in its antecedents (e.g. nurse shortage in some sectors) and impact on dissatisfaction, especially when the process is irregular, short and organised the day before or the day of the change itself (van Schingen, Dariel, Lefebvre, Challier, & Rothan-Tondeur, 2017). According to these negative implications, the importance of implementing a planned inter-unit mobility has been underlined (van Schingen et al., 2017). However, during a pandemic, unplanned mobility in new units has been documented as occurring often (Danielis & Mattiussi, 2020), but implications on staff have been poorly documented. As a consequence, evidence informing nurse managers in their delicate role is still limited.

The most recent systematic review on nurses' experience of working during the challenging times of a respiratory pandemic was conducted in 2020 (Fernandez et al., 2020), covering the period from 2005 (Chung, Wong, Suen, & Chung, 2005) to 2020 (Lam, Kwong, Hung, & Chien, 2020). Authors have examined studies highlighting the experiences of 348 nurses working in acute care hospitals during a viral respiratory pandemic, namely the severe acute respiratory syndrome (SARS), the Middle East respiratory syndrome (MERS), Avian influenza (H5N1) and the swine flu (H1N1). Of the 13 studies included in the final analysis, almost all were phenomenological in design and mainly performed in the South-East Asia (e.g. South Korea [Kim, 2018]). According to the findings, most research was focused on acute care nurses' shortages during the pandemics, and understaffing was one of the major issues affecting nurses who had been called to cope with a demanding work experience (Fernandez et al., 2020).

In other primary studies, nurses have been reported to experience stress when being reallocated and involved in settings such as infectious disease units outside their usual field of practice (Seale, Leask, Po, & MacIntyre, 2009). Moreover, rapidly changing the clinical practice setting without appropriate preparation has been reported as contributing to an increased sense of inadequacy, leading to vulnerability (e.g. workplace stress, concerns for physical and psychological safety) (Holroyd & McNaught, 2008; Shiao, Koh, Lo, Lim, & Guo, 2007). Furthermore, nurses deployed from a clinical area have reported a deterioration of the quality of care due to the moral distress from their perceived lack of competence in providing care (Corley, Hammond, & Fraser, 2010) and the perceived disruption of services caused by pandemics (Halcomb et al., 2020). In addition, nurses have reported the perception of increased workloads (Liu, Luo et al., 2020; Liu, Wang et al., 2020) also due to additional tasks (e.g. writing policies, educating staff, performing receptionist duties) incorporated in the nursing role (Halcomb et al., 2020; Shiao et al., 2007).

Each respiratory pandemic has been reported as having a significant impact on the employment status, as it leads to a profound change in the nursing role, practice and caseloads (Halcomb et al., 2020). Nowadays, recruiting resources and identifying new spaces to take care of COVID-19 patients are the main strategy to cope with the health care crisis. Accordingly, understanding the perceived meaning and challenges of nurses caring for COVID-19 patients in this context is crucial. However, to our best knowledge, experiences of nurses urgently and compulsorily reallocated in a new unit in times of substantial reorganisation of an acute care hospital have never been documented. Expanding knowledge regarding the nurses' mandatory mobility might help nurse managers to be proactive in identifying strategies to accompany this process successfully.

2 | AIM

The aim of this study was to describe the experiences of Italian nurses who have been urgently and mandatorily transferred in a newly established sub-intensive care unit for COVID-19 patients.

3 | METHOD

3.1 | Study Design

A qualitative descriptive study based on focus group methodology (Vaismoradi, Jordan, Turunen, & Bondas, 2014) was undertaken in May 2020 and reported here according to the COnsolidated criteria for Reporting Qualitative research principles (Tong, Sainsbury, & Craig, 2007). The study design was selected as its focus is on description, rather than examining relationships or associations (Kumar, 2018), and its capacity to explore new insights on a nursing-related phenomenon, by collecting perceptions from health care professionals directly involved (Kumar, 2018).

3.2 | Setting and Sample

A 1,000-bed academic hospital located in north-east Italy was approached. Specifically, a newly created sub-intensive care unit with a total of 19 beds was selected as the study setting. This unit provided

care for COVID-19 patients discharged from the intensive care unit between 21 March (opening day) and 24 April (unit closure) 2020. The staff included registered nurses (RNs), medical doctors (MDs), nurse assistants (NAs), physical therapists (PTs) and respiratory therapists (RTs). The nurse-to-patient ratio was 1:3, with three NAs per shift.

A maximum variation purposeful sample method (Patton, 2015) was adopted. Specifically, RNs who were (a) transferred urgently and mandatorily to the newly established sub-intensive care unit, (b) at any level of professional nursing experience and (c) willing to participate in the study were eligible. Thus, all 28 RNs were invited to participate in the study by the nurse managers (LP, TC). Nurse managers were entrusted with the recruitment strategy of the participants due to their (a) professional role, (b) knowledge of the research project and (c) on-the-job experience. However, each eligible participant was left free to participate or not in the study. A total of four RNs refused to participate mainly due to time constraints due to family responsibilities.

3.3 | Data collection procedure

Four focus groups were conducted by two researchers (MD and EM) who were nurse educators working at the university level and urgently recruited in the sub-intensive care for COVID-19 patients' unit during the first outbreak. They possessed advanced education in the nursing field and were trained to conduct interviews. Given their clinical role, they were in contact at the time of interviews with participants (e.g. work colleagues). The focus groups were carried out at the end of the first Italian wave, shortly after the sub-intensive unit closure.

Six nurses were, on average, involved for each focus group; the focus groups were ended when data saturation was reached (Vasileiou, Barnett, Thorpe, & Young, 2018), as judged by two researchers independently (MD and EM). Researchers (MD and EM) acted as moderator and interviewer, respectively. The main question asked was—'*can you please describe your experience of being urgently and mandatorily transferred to this newly created sub-intensive care unit caring for patients with COVID-19?*'—by encouraging answers and interactions among participants. In addition, probing questions were asked during meetings (e.g. '*What do you mean?*' and '*Can you explain this a little further?*') to clarify the experiences or turn the attention back to the main topic. The interview questions were not provided in advance to the participants.

All focus groups were conducted in a ventilated, quiet and private room in the hospital to ensure confidentiality and facilitate the comfort of participants. In addition, all participants adhered to physical distancing and wearing of face masks throughout the focus group discussion to avoid aerosol transmission of COVID-19. At the beginning of the discussions, researchers presented the study aims and collected demographic and professional data (e.g. age, education). Each focus group lasted approximately 60 minutes (range: 50–75 minutes).

3.4 | Data analysis

First, the audio-recorded focus groups were all *verbatim*-transcribed. Consecutively, three researchers (MD, EM and LP) carefully and independently read the narratives to acquire a global view of the experiences. Then, the data were thematically categorized by induction (Tie, Birks, & Francis, 2019).

The first step was to highlight the meaning of each participant's narrative by attempting to recognize the actual sense that RNs ascribed to his/her personal experience. Particular attention was given to words used by them. Then, a preliminary coding of the data was performed independently by three researchers (MD, EM and LP) following an inductive approach (Hsieh & Shannon, 2005), with disagreements solved by involving a fourth researcher (TP). In this step, researchers also identified and labelled the representative quotes from RNs' words. To ensure anonymity, quotes were indexed as being from one of the four focus groups (e.g. FG_1), and each RN was numbered consecutively (e.g. RN_1).

Then, codes as defined by researchers were merged in categories and subsequently aggregated in themes (Tie et al., 2019). Three researchers (MD, EM and LP) performed the analysis separately. Thereafter, they discussed the findings that emerged and labelled categories and themes through a constructive dialogue. The coding stage created a total of 20 initial codes where each quote extracted was categorized. In the second stage, codes with similar meanings and concepts were grouped into six categories. Then, the last process of data synthesis resulted in the generation of three themes. The final list of codes, categories and themes was mutually agreed on.

3.5 | Rigour

Methodological rigour (Maher, Hadfield, Hutchings, & de Eyto, 2018) was ensured by following different strategies: (a) *credibility* was pursued by involving nearly all RNs working in the unit and by engaging researchers with adequate knowledge and research skills (see authors); (b) *dependability* was ensured by homogeneous questions, prompts and stimuli across all focus groups; (c) *confirmability* was achieved by reporting quotes and a detailed description of their source (a path of the entire process is available from the authors upon request); and (d) *transferability* was ensured by using a maximum variation purposeful sample until data saturation.

3.6 | Ethical considerations

The research protocol was approved by the nurse director of the hospital and by the chief nurses. According to the Italian regulations and to the nature of the study, namely qualitative data collection without patients' involvement, no authorization from the Ethical Committee was required. RNs were approached and asked to participate in the study on a voluntary basis; moreover, at the beginning

of each focus group, participants' written consent to study participation was collected. In addition, RNs were also free to withdraw from the study at any time and they did not receive any reward. Privacy, rights and confidentiality of participants were ensured throughout each phase of the study by anonymizing the focus group narrative. This study was conducted according to the criteria set by the Declaration of Helsinki.

4 | RESULTS

The study included 24 RNs, mostly females (70.8%; $n = 17$), with an average age of 34.1 years. As reported in Table 1, the majority were educated at the university level (79.2%; $n = 19$), and over 90% were working full-time. Participants reported on average 9.3 years of work experience as a nurse; the majority of them were working in medical (41.7%; $n = 10$) and acute care settings (33.3%; $n = 8$) just before starting the experience in the sub-intensive care unit for COVID-19 patients.

The experience of being urgently and mandatorily transferred to a newly established unit is expressed by three themes: (a) 'becoming a frontline nurse', (b) 'living a double-faced professional experience' and (c) 'advancing in nursing practice' (Table 2).

4.1 | Becoming a frontline nurse

Nurses transferred urgently to the new unit felt themselves as called to the frontline. Due to the great challenge that they had in front of them and the urgency of the call not giving them the time required to be prepared both personally and professionally, nurses felt mixed emotions and a sense of unpreparedness.

Specifically, the mixed emotions were reported as emerging in the early stage of the urgent recruitment. While some participants reported being frightened by the unknown—'*Fear lies in not knowing the danger*' (RN2)—others experienced a lack of information and preparedness—'*I was called in one afternoon for a night shift in the infectious disease unit, and after one hour I was told to come here* [the sub-intensive care unit] *for the following day*' (RN4). This experience triggered a widespread sense of inadequacy: '*I immediately felt inadequate and even unqualified due to my previous professional experiences*' (RN20).

As a consequence, most of the nurses perceived unpreparedness to practically respond to the call. As described in Table 2, a participant complained that (s)he was not ready in time to be on duty, as there was just not enough information: '*I was called in at 7 p.m. to come at 9 with no information whatsoever*' (RN11). In addition, as the health care professionals caring for COVID-19 patients had to protect themselves and other patients from contagion, nurses tried to do their best to gain clearly defined pathways: '*We tried to create the dirty/clean pathways with tape, but we didn't know if we were doing it correctly*' (RN12). Some nurses recognized their own skill limitations and the need for supervision: '*As newcomers, we didn't know the drugs,*

TABLE 1 Participants' characteristics

	Registered nurses $N = 24$
Gender, n (%)	
Female	17 (70.8)
Age, years, mean (SD)	34.1 (6.7)
Education, n (%)	
Nursing diploma	2 (8.3)
Bachelor's degree	3 (12.5)
Advanced education[a]	19 (79.2)
Working hours/week, n (%)	
>30	22 (91.7)
Working experience, years, mean (SD)	9.3 (6.8)
Working unit before the current experience, n (%)	
Medical	10 (41.7)
Acute	8 (33.3)
Surgical	3 (12.5)
Chronic	3 (12.5)

SD, standard deviation.
[a]For example. master's degree

the treatment protocols...there were things we had to learn by ourselves' (RN6). However, given that all nurses were newcomers and unprepared and no experts were available, the occasions for supervision were limited.

4.2 | Living a double-faced professional experience

In overcoming the first impact of being urgently transferred, nurses began to live a double-faced experience, where on the one side they experienced an ever-desired nursing care, and on the other, they suffered breakdowns in the care processes never experienced before.

Nurses rapidly changed their patterns of care according to the optimal conditions created by nurse managers where the amount of staff and the skill mix were appropriate: '*Having less patients to care for, thus, a fair nurse-to-patient ratio, guarantees a relationship with the patient*' (RN21). Paradoxically, they reported implementing a primary nursing model of care for the first time '*being able to ensure a 360° of care, broaden social skills and timing* (RN20)', because in daily care, this was prevented by the unfavourable nurse-to-patient ratio. According to their experience, nurses focused their priorities on (a) spending time in therapeutic relationships by helping patients to cope and stay relaxed: '*the shared stories, staying together to listen to them, to keep them calm*' (RN12); (b) implementing new strategies of communication by using mobile phones, tablets and computers, thus preventing a sense of loneliness in patients—'*the video call with a tablet...knowing that you can communicate with a family member*' (RN13)—given the perceived need for support; and (c) improving patients' physical residual abilities, as in the case of eating and drinking: '*I encouraged them to recover their independence*' (RN5).

TABLE 2 Data synthesis by extracting and abstracting findings in common categories and themes

Abstraction: Themes	Abstraction: Categories	Codes as defined by researchers	Example of quotes extracted from focus groups	Focus groups/ registered nurses
Becoming a frontline nurse	Feeling mixed emotions	Being frightened	'…fear lies in not knowing the danger'. (FG_1RN_2)	FG_1RN_2, FG_1RN_4, FG_2RN_{10}, FG_2RN_{12}, FG_3RN_{13}, FG_3RN_{15}, FG_4RN_{19}, FG_4RN_{21}, FG_4RN_{22}
		Living in uncertainty	'…first, one week at home without knowing where I would go, you don't know what to expect,…then, I was called in one afternoon for a night shift in infectious diseases and after one hour I was told to come here the day after…' (FG_1RN_4)	FG_1RN_2, FG_1RN_4, FG_2RN_9, FG_2RN_{12}, FG_3RN_{18}, FG_4RN_{20}
		Feeling inadequate	'…from a professional point of view, I immediately felt inadequate and even unqualified due to previous professional experiences'. (FG_4RN_{20})	FG_1RN_1, FG_1RN_4, FG_2RN_8, FG_3RN_{16}, FG_3RN_{17}, FG_4RN_{20}
	Perceiving unpreparedness	Being unready	'I was called in at 7 p.m. to come at 9 with no information whatsoever'. (FG_2RN_{11})	FG_1RN_2, FG_1RN_6, FG_2RN_7, FG_2RN_{10}, FG_2RN_{11}, FG_3RN_{16}, FG_4RN_{23}, FG_4RN_{24}
		Trying to do our best	'We tried to create the dirty/clean pathways with tape, but we didn't know if we were doing it right'. (FG_2RN_{12})	FG_1RN_3, FG_1RN_5, FG_2RN_9, FG_2RN_{12}, FG_3RN_{19}
		Being in need of supervision	'What was also missing was the brainstorming with the other departments involved in this emergency; as newcomers, we didn't know the medications the treatment protocols… there were things we had to learn by ourselves. In other words, positive feedback and constant updates were lacking'. (FG_1RN_6)	FG_1RN_1, FG_1RN_2, FG_1RN_6, FG_2RN_8, FG_2RN_9, FG_2RN_{11}, FG_2RN_{12}, FG_3RN_{13}, FG_3RN_{15}, FG_3RN_{18}, FG_4RN_{19}, FG_4RN_{20}, FG_4RN_{22}, FG_4RN_{23}
Living a double-faced of professional experience	Experiencing ever-desired nursing care	Caring for the right number of patients	'Having fewer patients to care for, thus, a fair nurse-to-patient ratio'. (FG_4RN_{21})	FG_1RN_5, FG_2RN_9, FG_2RN_{11}, FG_3RN_{18}, FG_4RN_{21}
		Experiencing a primary nursing model of care	'Being able to guarantee a 360° assistance, broaden social skills and timing…trying to redirect a confused patient, being close to a patient with their legs out of bed, shampooing … these were strong points'. (FG_4RN_{20})	FG_1RN_1, FG_1RN_3, FG_1RN_5, FG_2RN_7, FG_2RN_9, FG_2RN_{11}, FG_3RN_{15}, FG_3RN_{16}, FG_3RN_{18}, FG_4RN_{20}, FG_4RN_{21}, FG_4RN_{23}
		Perceiving the need for psychological support to patients	'I would have liked more involvement from a psychological point of view, in this health emergency, against an invisible virus that nobody knew and on which there were so many uncertainties, a greater psychological involvement for the patients, of course'. (FG_4RN_{24})	FG_1RN_1, FG_1RN_3, FG_1RN_6, FG_3RN_{13}, FG_4RN_{24}
		Having time to spend with patients	'The time we dedicated to them, the shared stories, staying together to listen to them, to keep them calm, things that you cannot do elsewhere'. (FG_2RN_{12})	FG_1RN_3, FG_2RN_7, FG_2RN_{12}, FG_3RN_{17}, FG_4RN_{20}
		Implementing innovative communication strategies	'Another strong point was also the video call with a tablet because some patients are disoriented and, while you see people wearing heavy protections all around you, knowing that you can communicate with a family member, that even the nurse can talk with them, is extremely useful, something which should be studied and explored for semi-intensive and intensive care units'. (FG_3RN_{13})	FG_1RN_2, FG_1RN_6, FG_2RN_7, FG_3RN_{13}, FG_3RN_{16}, FG_4RN_{23}, FG_4RN_{24}

(Continues)

TABLE 2 (Continued)

Abstraction: Themes	Abstraction: Categories	Codes as defined by researchers	Example of quotes extracted from focus groups	Focus groups/ registered nurses
		Improving patients' physical residual ability	'In some instances, I encouraged the patients to do things by themselves...it comes natural to me...and I encouraged them to recover their independence'. (FG_1RN_5)	FG_1RN_5, FG_2RN_9, FG_2RN_{11}, FG_3RN_{18}, FG_4RN_{21}
	Suffering breakdowns in care processes	Coping with the new documentation system	'The use of nursing documentation is fundamental and arriving in a ward where no one had ever seen that documentation was a weak point...' (FG_2RN_7)	FG_1RN_4, FG_2RN_7, FG_2RN_{11}, FG_4RN_{19}, FG_4RN_{21}
		Dealing with some critical issues in collaboration with other HCPs	'Perhaps the collaboration between nurses and doctors and between nurse assistants and nurses was challenging; it would have been better to work on it a bit more'. (FG_2RN_{10})	FG_1RN_2, FG_1RN_5, FG_2RN_{10}, FG_3RN_{16}, FG_4RN_{19}, FG_4RN_{20}
		Mixing different habits regarding nursing practices	'...the struggle to introduce evidence-based nursing in a ward, sometimes even if a practice, such as calculating the water balance, is easily resolvable if an operational definition for fluid balance is introduced. There is still a great resistance stemming from mere habit...' (FG_3RN_{15})	FG_2RN_8, FG_3RN_{15}, FG_3RN_{18}
Advancing in nursing practice	Coping with the challenging working environment	Compensating for lack of knowledge	'Risks create tension in seeking information... we are eager to look online...online courses, scientific articles'. (FG_1RN_3)	FG_1RN_1, FG_1RN_3, FG_2RN_{10}, FG_3RN_{13}, FG_3RN_{17}, FG_4RN_{22}
		Experiencing mutual support within the team	'I never felt alone, and there was always someone who, before I asked, asked me if I needed help. This was the strong point of this group'. (FG_2RN_9)	FG_1RN_2, FG_1RN_4, FG_2RN_7, FG_2RN_9, FG_2RN_{11}, FG_3RN_{14}, FG_3RN_{17}, FG_4RN_{20}, FG_4RN_{21}, FG_4RN_{23}, FG_4RN_{24}
	Expanding professional nursing role	Having gained new competencies	'It is easier to say what I have learned, such as non-invasive ventilation devices like helmets, masks, and high-flow nasal cannula, on which I was helped by a colleague from Pulmonology... it is easier to learn on the field than at home from books; I have used everything that I have lived and experienced over the years. You don't learn to see the emptiness in the patient's eyes at university but here'. (FG_2RN_{17})	FG_1RN_1, FG_1RN_2, FG_1RN_3, FG_1RN_5, FG_2RN_8, FG_2RN_{10}, FG_2RN_{11}, FG_2RN_{12}, FG_3RN_{13}, FG_3RN_{15}, FG_3RN_{17}, FG_3RN_{18}, FG_4RN_{21}, FG_4RN_{23}, FG_4RN_{24}
		Expanding decision-making abilities	'...another positive thing is that we made decisions on our own. Here we decided whether to remove PIVCs, NGTs, CVCs, and the doctors trusted us. This constant exchange should be the future of this profession; it should be a reality because it is a growth...' (FG_4RN_{23})	FG_1RN_4, FG_1RN_6, FG_2RN_8, FG_2RN_9, FG_2RN_{10}, FG_2RN_{12}, FG_3RN_{17}, FG_4RN_{19}, FG_4RN_{20}, FG_4RN_{23}
		Strengthening the professional role identity	'Also writing 'nurse' and putting the name on the front of the overalls was important. Paradoxically, I felt a stronger identity when in disguise than when I was not'. (FG_3RN_{16})	FG_1RN_3, FG_2RN_7, FG_2RN_9, FG_2RN11, FG_2RN_{12}, FG_3RN_{14}, FG_3RN_{16}, FG_4RN_{19}, FG_4RN_{21}

HCPs, health care professionals; PIVC, peripheral intravenous catheter; NGT, nasogastric tube; CVC, central venous catheter; FG_1RN_1, focus group n.1 registered nurse n.1.

By contrast, nurses suffered from breakdowns in the care processes never experienced before due to different factors. First of all, documenting nursing activities in the new forms was challenging, as '*no one had ever seen that documentation*' (RN7). The relationship with other health care professionals was also reported as a challenge because of the lack of reciprocal knowledge, trust, confidence and

experience as a team: '*It would have been better to work on it a bit more*' (RN10). Moreover, some nurses faced variability in the clinical approaches, requiring efforts in the attempt to establish shared standards of care: '*For example, calculating the fluid balance is easily resolvable if an operational definition for fluid balance is introduced*' (RN15).

4.3 | Advancing in nursing practice

The complexity of the experience was reported as a great opportunity to improve nursing practice. First, in the attempt to cope with the challenging environment by filling in the gaps in the knowledge, nurses reported to increase their efforts in self-directed learning by accessing '*online courses, scientific articles*' (RN3) and by establishing partnerships with their new colleagues with the purpose of helping each other: '*I never felt alone, and there was always someone who, before I asked, asked me if I needed help*' (RN9). As a consequence, nurses reported to experience the expansion of the professional nursing role by (a) gaining new competencies, '*such as non-invasive ventilation devices like helmets, masks, and high-flow nasal cannula*' (RN17) mainly on an individual basis, given that only distance educational practices were allowed; (b) increasing their decision-making abilities—'*We made decisions on our own; here we decided whether to remove devices*' (RN23)—thus increasing their professional independence; and (c) strengthening the professional role identity—'*I felt a stronger identity when in disguise than when I was not*' (RN16)—thus advancing the status of nursing.

5 | DISCUSSION

Every pandemic was reported to have a significant impact on employment status (Halcomb et al., 2020); however, no evidence on the experience of nurses who had been urgently recruited to a newly established unit has been documented to date. Having evidence on this phenomenon could provide the means to develop recommendations for nurse managers who are in charge of human resources management. In this context, we involved a group of experienced nurses with diverse clinical background acquired in different units. All of them were newcomers to the settings, the unknown patients' clinical issues, and also the nurse manager and staff. They lived a totally new personal and professional experience characterized by three main themes: 'becoming a frontline nurse', 'living a double-faced professional experience' and 'advancing in nursing practice'.

Practising on the frontline means that nurses perceived an enemy that they are called to fight. In describing the pandemic, words related to 'war' as concept and practice have been extensively used (e.g. Liu et al., 2020) but also recently questioned (Varma, 2020) because the pandemic–war analogy has been considered both dangerous *and* wrong. While pandemics require collective, concerted and coordinated responses, wars divide people. From their point of view,

our nurses seem to live this experience alone, as also the well-known process of socialization (Hunter & Cook, 2018) is not possible: in fact, each nurse was a newcomer in the unit, and no formal and/ or informal rules, norms or social processes had been established. Nurse managers are called to create a team, promote group rules and norms and create a concerted response to the challenge.

Throughout this experience, nurses' concerns about caring for COVID-19 patients were mainly due to the fear of the unknown infectious disease and the sense of unpreparedness. The first issue was also raised in 2003 with the severe acute respiratory syndrome outbreak and in 2006 with the Avian flu (Tzeng & Yin, 2006). Furthermore, many nurses expressed inadequacy in caring for patients affected by an emerging infectious disease, as previously documented (Ambrosi et al., 2020; Holroyd & McNaught, 2008; Lam et al., 2020), thus suggesting that these feelings are common in times of an outbreak. Concurrently, nurses' unpreparedness for a viral respiratory pandemic was reported as an existing problem, in line with previous studies on the emerging infectious disease outbreaks (Holroyd & McNaught, 2008; Lam et al., 2020). In addition, due to the unexpected nature of the pandemic, nurses were suddenly introduced to the COVID-19 unit without appropriate training (Ambrosi et al., 2020). As a consequence, unpreparedness further increased concerns and uncertainties among nurses in the early phase of recruitment.

After this first stage of experience, where emotional issues prevailed, participants reported to have had the great opportunity to function as 'full nurses', because they were immersed in such a context where a proper number of resources in terms of nurse-to-patient ratio allowed them to implement the desired care. This finding constitutes a novelty as compared to the available literature. First, once the appropriate nurse-to-patient ratio was provided, participants implemented the primary nursing care model. Then, owing to the severity of the illness and the complexity of the clinical, psychological and social needs due to forced isolation (Lucchini et al., 2020), nurses also engaged in providing human care by considering all fundamental needs. In order to overcome patients' sense of isolation in the absence of family caregivers, nurses reported their engagement in spending time in therapeutic relationships with patients and in performing effective video-calling with family members, as recommended by Negro et al. (2020). Along this line, nurses seem to have experienced a unique condition whereby it could be possible to prevent missed nursing care (Longhini et al., 2020), typically regarding emotional support and basic care needs required by both patients and families.

In contrast, the newly created team in the new unit caused some breakdowns in the care processes: in using the new documentation which triggered difficulties, in meeting the need to build the team by overcoming communication issues and in establishing appropriate care standards while dealing with the variability in clinical approaches. All these aspects could be explained by the fact that the new unit was created in a short time and that all members of staff were new and had different backgrounds. Therefore, it seems

that nurses experienced issues in those aspects that are usually well established in the units, such as the documentation processes, the communication among team members and the standard of care. In other words, they experienced an in-depth break in routine rules and actions (Rytterstrom, Unosson, & Arman, 2011). Within this framework, nurse managers can have a great responsibility to establish, develop and support meaningful routines (Rytterstrom et al., 2011). Moreover, establishing a technical support team and preparing training plans to meet all requirements could be helpful strategies when setting up new COVID-19 units in order to maintain a high standard of care (Wu et al., 2020).

In the face of various challenges, at the end of the experience, participants reported a global growth at (a) individual level, where they experienced the full responsibility of being a self-directed learner; (b) team level, where reciprocal solidarity and support increased the overall capacity of the group; and (c) professional level, where the nursing role was expanded. In spite of coming from different clinical backgrounds, nurses worked in multidisciplinary teams centred on collaborative care, which is considered a crucial approach to enhance patient outcomes, especially in pandemics (Fernandez et al., 2020). Moreover, the bedside nurses caring for COVID-19 patients felt boosted in their professional role and identity, in line with a previous study that reported Chinese nurses' narratives of caring for severe acute respiratory syndrome patients (Liu & Liehr, 2009). Similarly, as reported in our study, nurses' beliefs about professional growth were consistent with the study by Corley et al. (2010), particularly in terms of acquired skills (e.g. airway management). All of these growth processes reflect the great ability to adapt to a new situation and to cope with resilience. In other words, nurses' shift from negative feelings to positive outcomes leads to the idea that they experienced post-traumatic growth, as recently documented (Cui et al., 2020).

5.1 | Study limitations

Some limitations of this study need to be acknowledged. First, we involved nurses caring for COVID-19 patients in a sub-intensive care context, which was only a part of the entire hospital undergoing a full restructuring. Therefore, in the future, it is advisable to involve different settings of care. Moreover, we involved only expert nurses (with > 9 years of experience) suggesting that it should be important to study the experiences of novice nurses as well as those of other health care professionals' mandatory recruited in the care of COVID-19 patients (e.g. medical doctors and physiotherapists). Additionally, the data were collected at the end of May 2020, during lockdown and when the sub-intensive care unit was near to its close. Therefore, the narratives might be influenced by the short duration of the experience and by its imminent ending. Collecting longitudinal data in different time points from these nurses—and from others involved in the second wave of COVID-19 with longer working involvement—could help in understanding the entire experience.

6 | CONCLUSIONS

Considering the current and ongoing situation of the COVID-19 pandemic and the reality of mandatory redeployment of nurses to areas providing acute care to this group of patients, having data on their lived experience might support nurse managers in their decision-making processes. Nurses who lived the experience of being mandatorily recruited and urgently reallocated to a COVID-19 unit reported a mix of negative feelings in the early stages. Then, they experienced a double-faced situation as they merged positive and negative experiences which were triggered by the opportunity to implement the primary care model, mainly due to the appropriate nurse-to-patient ratio, while the absence of routines and rules in the unit capable of ensuring a sense of security, all increase the difficulty. At the end of the experience, nurses reached a point where they experienced global growth as a person, as a team and as a professional.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

Nurse managers have a key role in actively supporting nurses before, during and after the pandemic outbreak. In particular, proper communication, training and adequate resources seem to be mandatory to prevent nurses' concerns and fears in the initial stages. Moreover, in preparing for the second wave, or in future outbreaks, identifying and preparing expert nurses on a voluntary basis in advance, by offering them simulation sessions, can prevent concerns as well as the sense of unpreparedness that might affect self-confidence, increasing moral distress and frustration.

The adequate amount of staff provided in the newly established unit allowed nurses to rediscover some elements of fundamental care and to implement the primary care model. Caring for COVID-19 patients turned out to also be an opportunity for improving team working and collaboration. Creating opportunities where nurses can share these experiences might help them to give meaning and to increase confidence in nurses not involved in the first wave, as, for example, students. However, the value attributed to the nursing care and to the appropriate amount of nursing resources at the bedside during the pandemic should be promoted and continued by nurse leaders also over the outbreak while returning to normality.

Finally, it is imperative to continue to collect precious insights from nurses' experiences in order to support innovative actions for future pandemic outbreaks. In addition, this extraordinary situation may stimulate new ideas for a systems approach to health care delivery, such as enforcing technological innovation, decentralizing services in a range of settings (e.g. community health programmes) or considering to make available temporary wards with dedicated staff that can be easily recruited in the case of a health emergency.

CONFLICT OF INTEREST

All the authors have no financial or other relationships to report.

AUTHOR CONTRIBUTIONS

MD, LP, EM and MM designed the study; MD, EM, LP and TC collected the data; MD, EM, LP, TC and TP analysed the data; and MD, EM, LP and AP wrote the manuscript; and all authors revised and confirmed the final version of the manuscript.

ETHICAL APPROVAL

No ethical approval was required for this article.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ORCID

Matteo Danielis https://orcid.org/0000-0002-7417-3452
Alvisa Palese https://orcid.org/0000-0002-3508-844X

REFERENCES

Ambrosi, E., Canzan, F., Di Giulio, P., Mortari, L., Palese, A., Tognoni, G., & Saiani, L. (2020). The covid-19 emergency in the words of the nurses. *Assistenza Infermieristica e Ricerca*, *39*(2), 66–108. https://doi.org/10.1702/3409.33934

Baggiani, A., Briani, S., Luchini, G., Giraldi, M., Martino, M. C., Porretta, A., ... Privitera, G. (2020). Management of healthcare areas for the prevention of COVID-19 emergency in an Italian teaching hospital (Pisa, Tuscany): A hospital renovation plan. *Infection Control and Hospital Epidemiology*, *1–6*, https://doi.org/10.1017/ice.2020.177

Bagnasco, A., Zanini, M., Hayter, M., Catania, G., & Sasso, L. (2020). COVID 19-A message from Italy to the global nursing community. *Journal of Advanced Nursing*, *76*(9), 2212–2214. https://doi.org/10.1111/jan.14407

Chung, B. P. M., Wong, T. K. S., Suen, E. S. B., & Chung, J. W. Y. (2005). SARS: Caring for patients in Hong Kong. *Journal of Clinical Nursing*, *14*(4), 510–517. https://doi.org/10.1111/j.1365-2702.2004.01072.x

Corley, A., Hammond, N. E., & Fraser, J. F. (2010). The experiences of health care workers employed in an Australian intensive care unit during the H1N1 Influenza pandemic of 2009: A phenomenological study. *International Journal of Nursing Studies*, *47*(5), 577–585. https://doi.org/10.1016/j.ijnurstu.2009.11.015

Cui, P. P., Wang, P. P., Wang, K., Ping, Z., Wang, P., & Chen, C. (2020). Post-traumatic growth and influencing factors among frontline nurses fighting against COVID-19. *Occupational and Environmental Medicine*, https://doi.org/10.1136/oemed-2020-106540. [Epub ahead of print].

Danielis, M., & Mattiussi, E. (2020). The care of patients through the lens of the fundamentals into times of the COVID-19 outbreak. *Intensive and Critical Care Nursing*, *60*, 102883. https://doi.org/10.1016/j.iccn.2020.102883

Fernandez, R., Lord, H., Halcomb, E., Moxham, L., Middleton, R., Alananzeh, I., & Ellwood, L. (2020). Implications for COVID-19: A systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. *International Journal of Nursing Studies*, *111*, 103637–https://doi.org/10.1016/j.ijnurstu.2020.103637

Halcomb, E., McInnes, S., Williams, A., Ashley, C., James, S., Fernandez, R., ... Calma, K. (2020). The experiences of primary healthcare nurses during the COVID-19 pandemic in Australia. *Journal of Nursing Scholarship*, *52*(5), 553–563. https://doi.org/10.1111/jnu.12589.

Holroyd, E., & McNaught, C. (2008). The SARS crisis: Reflections of Hong Kong nurses. *International Nursing Review*, *55*(1), 27–33. https://doi.org/10.1111/j.1466-7657.2007.00586.x

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687.

Hunter, K., & Cook, C. (2018). Role-modelling and the hidden curriculum: New graduate nurses' professional socialisation. *Journal of Clinical Nursing*, *27*(15–16), 3157–3170. https://doi.org/10.1111/jocn.14510

Kim, Y. (2018). Nurses' experiences of care for patients with Middle East respiratory syndrome-coronavirus in South Korea. *American Journal of Infection Control*, *46*(7), 781–787. https://doi.org/10.1016/j.ajic.2018.01.012

Kumar, R. (2018). *Research methodology: A step-by-step guide for beginners*, 3rd edn. Sage Publications, Pp-334

Lam, S. K. K., Kwong, E. W. Y., Hung, M. S. Y., & Chien, W. T. (2020). Emergency nurses' perceptions regarding the risks appraisal of the threat of the emerging infectious disease situation in emergency departments. *International Journal of Qualitative Studies on Health and Well-Being*, *15*(1), https://doi.org/10.1080/17482631.2020.1718468

Lipsitch, M., Swerdlow, D. L., & Finelli, L. (2020). Defining the epidemiology of Covid-19-studies needed. *New England Journal of Medicine*, *382*(13), 1194–1196. https://doi.org/10.1056/NEJMp2002125

Liu, H. P., & Liehr, P. (2009). Instructive messages from Chinese nurses' stories of caring for SARS patients. *Journal of Clinical Nursing*, *18*(20), 2880–2887. https://doi.org/10.1111/j.1365-2702.2009.02857.x

Liu, J. L., & Liu, S. R. (2020). The management of coronavirus disease 2019 (COVID-19). *Journal of Medical Virology*, *92*(9), 1484–1490. https://doi.org/10.1002/jmv.25965

Liu, Q., Luo, D., Haase, J. E., Guo, Q. H., Wang, X. Q., Liu, S., ... Yang, B. X. (2020). The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study. *Lancet Global Health*, *8*(6), E790–E798. https://doi.org/10.1016/s2214-109x(20)30204-7

Liu, Y., Wang, H., Chen, J. H., Zhang, X., Yue, X., Ke, J., ... Peng, C. H. (2020). Emergency management of nursing human resources and supplies to respond to coronavirus disease 2019 epidemic. *International Journal of Nursing Sciences*, *7*(2), 135–138. https://doi.org/10.1016/j.ijnss.2020.03.011

Longhini, J., Papastavrou, E., Efstathiou, G., Andreou, P., Stemmer, R., Strohm, C., ... Palese, A. (2020). Strategies to prevent missed nursing care: an international qualitative study based upon a positive deviant approach. *Journal of Nursing Management*, https://doi.org/10.1111/jonm.13176. [Epub ahead of print].

Lucchini, A., Giani, M., Elli, S., Villa, S., Rona, R., & Foti, G. (2020). Nursing Activities Score is increased in COVID-19 patients. *Intensive and Critical Care Nursing*, *59*, https://doi.org/10.1016/j.iccn.2020.102876

Maher, C., Hadfield, M., Hutchings, M., & de Eyto, A. (2018). Ensuring rigor in qualitative data analysis: A design research approach to coding combining NVivo with traditional material methods. *International Journal of Qualitative Methods*, *17*(1), https://doi.org/10.1177/1609406918786362

Mari, G. M., Crippa, J., Casciaro, F., & Maggioni, D. (2020). A 10-step guide to convert a surgical unit into a COVID-19 unit during the COVID-19 pandemic. *International Journal of Surgery*, *78*, 113–114. https://doi.org/10.1016/j.ijsu.2020.04.052

Negro, A., Mucci, M., Beccaria, P., Borghi, G., Capocasa, T., Cardinali, M., ... Zangrillo, A. (2020). Introducing the Video call to facilitate the communication between health care providers and families of patients in the intensive care unit during COVID-19 pandemia. *Intensive & Critical Care Nursing*, *60*, 102893. https://doi.org/10.1016/j.iccn.2020.102893

Patton, M. Q. (2015). *Qualitative research and evaluation methods*, 4th edn. Sage, USA.

Rosenbaum, L. (2020). Facing Covid-19 in Italy – Ethics, logistics, and therapeutics on the epidemic's front line. *New England Journal of*

Medicine, 382(20), 1873–1875. https://doi.org/10.1056/NEJMp2005492

Rytterstrom, P., Unosson, M., & Arman, M. (2011). The significance of routines in nursing practice. *Journal of Clinical Nursing, 20*(23–24), 3513–3522. https://doi.org/10.1111/j.1365-2702.2010.03522.x

Seale, H., Leask, J., Po, K., & MacIntyre, C. R. (2009). "Will they just pack up and leave?" – Attitudes and intended behaviour of hospital health care workers during an influenza pandemic. *BMC Health Services Research, 9,* https://doi.org/10.1186/1472-6963-9-30

Shiao, J. S. C., Koh, D., Lo, L. H., Lim, M. K., & Guo, Y. L. L. (2007). Factors predicting nurses' consideration of leaving their job during the SARS outbreak. *Nursing Ethics, 14*(1), 5–17. https://doi.org/10.1177/0969733007071350

The Lancet Infectious Disease (2020). COVID-19, a pandemic or not? *The Lancet Infectious Diseases, 20*(4), 383. https://doi.org/10.1016/s1473-3099(20)30180-8

Tie, Y. C., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *Sage Open Medicine, 7,* 8. https://doi.org/10.1177/2050312118822927

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care, 19*(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Tzeng, H. M., & Yin, C. Y. (2006). Nurses' fears and professional obligations concerning possible human-to-human avian flu. *Nursing Ethics, 13*(5), 455–470. https://doi.org/10.1191/0969733006nej893oa

van Schingen, E., Dariel, O., Lefebvre, H., Challier, M. P., & Rothan-Tondeur, M. (2017). Mandatory internal mobility in French hospitals: the results of imposed management practices. *Journal of Nursing Management, 25*(1), 4–12. https://doi.org/10.1111/jonm.12417

Vaismoradi, M., Jordan, S., Turunen, H., & Bondas, T. (2014). Nursing students' perspectives of the cause of medication errors. *Nurse Education Today, 34*(3), 434–440. https://doi.org/10.1016/j.nedt.2013.04.015

Varma, S. (2020). A pandemic is not a war: COVID-19 urgent anthropological reflections. *Social Anthropology,* https://doi.org/10.1111/1469-8676.12879. [Epub ahead of print].

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC Medical Research Methodology, 18,* 18. https://doi.org/10.1186/s12874-018-0594-7

WHO. (2020). World Health Organization. https://www.WHO.int/emergencies/diseases/novel-coronavirus-2019 [Last Accessed on 08th December, 2020].

Wu, X. Y., Zheng, S. Y., Huang, J. J., Zheng, Z. L., Xu, M. Q., & Zhou, Y. H. (2020). Contingency Nursing Management in Designated Hospitals During COVID-19 Outbreak. *Annals of. Global Health, 86*(1), https://doi.org/10.5334/aogh.2918