

Italian Nurses' experiences during the COVID-19 pandemic: a qualitative analysis of internet posts

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Aim: To investigate the experience of Italian nurses during the first wave of the COVID-19 outbreak by analysing professional social media posts.

Background: The COVID-19 outbreak has overwhelmed health care institutions; as a consequence, nurses' lives and psycho-physical health have been affected.

Introduction: The COVID-19 pandemic forced nurses to work in physically and psychologically stressful conditions impacting on their life.

Methods: A qualitative descriptive study. All narratives (texts and videos) posted by nurses from the 23rd of February 2020 to the 3rd of May (from the start of the outbreak to the end of the first lockdown) were analysed and published on the five most popular Italian professional social media platforms. The Consolidated Criteria for Reporting Qualitative research guidelines were followed.

Results: Five themes emerged from the 380 narratives explored: 'Sharing what is happening within myself'; 'Experiencing unprecedented working conditions'; 'Experiencing a deep change'; 'Failing to rehabilitate the image of nurses in society'; and 'Do not abandon us'. Even though nurses appreciated the recognition of their communities, they still felt devalued and not recognized as professionals.

Discussion: Several psychological, physical, social and professional implications emerged from nurses working during the COVID-19 pandemic. Despite being highly praised, nurses perceived they had failed in rehabilitating the image of nurses in society.

Conclusion: The experience of working during the COVID-19 pandemic represented a traumatic event for nurses but it offered them personal and professional growth opportunities.

Implications for nursing practice, nursing policy and health policy: Supporting nurses' mental health is highly recommended, together with a cultural investment on nurses' role recognition, and a zero-tolerance policy towards violence and aggression towards nurses.

Keywords: COVID-19, Experience, Public image, Nurses, Social media, Mental health, Nursing practice

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Introduction

The Coronavirus Disease 2019 (COVID-19), which was identified in early 2020, spread quickly around the world and was declared a global pandemic by the World Health Organization on the 11th of March 2020 (Catton 2020a), reaching a total amount of confirmed cases of 96.877.399 in 220 countries by the 23rd of January 2021 (World Health Organization 2020).

Pneumonia, bronchitis and acute respiratory syndrome are the most severe manifestation of infection and might require hospitalization (Beeching et al. 2020). Due to the important changes made in hospital layouts, and for units and staff having to address the new care needs, the COVID-19 pandemic has heavily affected nurses' lives and psycho-physical health (Ambrosi et al. 2020).

Studies have investigated the experience of nurses during previous outbreaks (e.g. Severe Acute Respiratory Syndrome, Middle-East-Respiratory-Syndrome; cf., Lam & Hung 2013) as well as during the first wave of COVID-19 (e.g. Lai et al. 2020). Their experiences have been researched both qualitatively and quantitatively and researchers have documented the lack of organizational support, the challenges of working with personal protective equipment (PPE), and the physical impacts (e.g. insomnia, headache), alongside the difficulty they experience in keeping their knowledge up to date (e.g. Im et al. 2017). Moreover, the fear of becoming infected and of infecting one's relatives and friends, the sense of helplessness in the face of an unknown disease, the feeling of being hopeless and cut-off but at the same time of being proud of the work that one is doing, depression, anxiety and post-traumatic stress disorder have also been documented (Kang et al. 2020; Lai et al. 2020; Ornell et al. 2020; Pappa et al. 2020). However, social media platforms, which are omnipresent in daily life and are heavily used by nurses (Wang et al. 2019) both personally and professionally (Green 2017) to share stories, engage and connect with a large audience, have not been very much considered so far in this research field. There are studies which are actively recruiting participants to stimulate reflections on a given experience since social media platforms are natural environments where anyone can express spontaneously and publicly their own experiences; as a result, social media might improve the public image of nurses, an image which has always been stigmatized (Kelly et al. 2012). However, social media might also negatively influence public opinion depending on the information provided.

To the best of our knowledge, only one study (Wahbeh et al. 2020) has explored COVID-19-related Twitter posts of physicians, identifying some major professional concerns regarding recommendations to fight disinformation and other issues. Moreover, nursing appeals through Brazilian Twitter and Instagram posts (e.g. 'stay at home') during the COVID-19 pandemic have been analysed from March 11th to March 20th, 2020, suggesting that preserving memories of this historic moment can serve as a reminder to society and policy makers that in the worst moments of humanity this profession has not ceased to be present (Forte & Pires de Pires 2020). Therefore, given the lack of studies in the field, the

main purpose of this study was to investigate the experiences of Italian nurses shared on social media during the first wave of the COVID-19 outbreak. Analysing their posts may be helpful in understanding both their personal and professional experiences and in identifying recommendations for nursing practice.

Method

Research design

A qualitative descriptive study (Kim et al. 2017) based on a descriptive phenomenology (Giorgi et al. 2017) was carried out in 2020 following the Consolidated criteria for Reporting Qualitative Research (COREQ) (Tong et al. 2007; Table S1).

Setting and sample

Social media platforms are defined as software that enables individuals and communities to gather, communicate, share and in some cases collaborate or play (Boyd 2009). In the context of our study, we considered professional social media platforms (Boyd & Ellison 2007) where nurses are free to share various forms of content in a 'fluid' format with the purpose of allowing the public to share their experiences. Specifically, the study selected professional nursing websites and Facebook pages that are highly popular among nurses according to reports of numbers of users/followers (Ukoha & Stranieri 2019).

All narratives in the form of texts and videos posted by nurses from the 23rd of February 2020 to the 3rd of May (the day before the end of the first lockdown; cf. Di Stefano 2020) and describing their personal experience during the COVID-19 health emergency in Italian were eligible. The study included posts: (a) written in Italian and English; (b) by nurses working in Italy; (c) published during the first wave of the COVID-19 outbreak; and (d) on Facebook pages and websites of the Italian nursing newspapers (AssoCareNews.it, Nurse24.it, InfermieristicaMente and NurseTimes) and of the National Nursing Foundation (FNOPI). Therefore, written or audio posts of nurses working abroad and of nursing students and other healthcare professionals were all excluded.

Data collection

One researcher scrutinized the professional social media posts published (RF) on a daily basis. Thus, she identified and extracted all posts (both in text and video format; hereinafter, narratives) by copying texts into a Microsoft Word file and listening to and transcribing verbatim video posts in the same Word file. In extracting the data, the chronological order in which they appeared online was maintained; moreover, all

available elements (day, hour, name of the nurse if reported, age, context) were copied. In four days randomly identified by a second researcher (AP), an independent blinded scrutiny of the same social media pages was performed, and findings were compared with those extracted by the first researcher. No discrepancies emerged.

In the end, a total of 475 pages and 202,626 words emerged. The sources of data (e.g. FNOPI) were anonymized and narratives were analysed all together.

Data analysis

The dataset was read in order to get the whole picture of the phenomenon. Then, from the Microsoft Word file containing all of the narratives, researchers (see authors) first extracted the demographic and professional data available (e.g. gender, age) by calculating frequencies, percentages, averages, standard deviations (SD, \pm) and ranges, according to the nature of the variables. After that, data regarding the narratives (= number of narratives; number of words) were explored in their correlations (=Pearson, r), if any, with the number of new cases and death reported officially in Italy, on a weekly basis. Secondly, the content analysis was performed by way of a systematic coding and categorizing approach aimed at exploring large amounts of textual information unobtrusively, so as to merge trends and patterns and their frequency (Vaismoradi et al. 2013). Specifically, the quotes were identified and extracted from each narrative by two researchers, and disagreements were resolved by discussion with a third author. The extracted quotes were then analysed (see authors) as follows: (a) reading and re-reading the text; (b) identifying the units of meaning, understood as those parts of the data capable of communicating sufficient information; (c) transforming the units of meaning into scientific language by creating subthemes and then themes; and (d) synthesizing all themes and subthemes (Giorgi et al. 2017).

Rigour and trustworthiness

To ensure rigour and trustworthiness (Sandelowski 2000; Vaismoradi et al. 2013), different strategies have been adopted (Tables S2 and S3).

Ethical considerations

We conducted this study in compliance with the principles outlined in the Declaration of Helsinki (World Medical Association Declaration of Helsinki 2000). According to the nature of the study, ethics approval was not required. However, the team discussed the ethical issues (Gelinas et al. 2017) that involve all research dealing with social media.

According to each issue identified, specific strategies have been implemented: (a) participants were passively recruited because their free public narratives were considered without asking for their consent; therefore, in order to protect them, full anonymization of their narratives (name, years) was ensured; (b) given that the information they shared was mainly designed for social connectivity and personal expression, while the aim of the study was to improve general knowledge, privacy was also ensured by removing all details from the quotes extracted; and (c) to protect them from the consequences of revealing sensitive issues related to their working conditions, without asking any authorization, each detail regarding the context (e.g. the name of the hospital, the city) was also removed.

Results

Narratives

A total of 380 narratives emerged (from 12 to 74/week) and a total of 202 626 words (on average, 533 words/narrative) (Table 1). The number of narratives significantly correlated with the number of cases (Pearson, $r = 0.993$; $P = <0.01$) and with the number of deaths ($r = 0.963$; $P = <0.01$) on a weekly basis as reported nationally; similarly, significant correlations emerged with the number of words of each narrative and the number of cases ($r = 0.993$; $P = <0.01$) and deaths ($r = 0.964$, $P = <0.01$), respectively.

A total of 219 narratives were written by female nurses (out of 371, 60%); only 48 (12.6%) reported the age, a mean of 35.5 (± 9.2) years. The majority of narratives were written by nurses working in the most affected region in Italy (Lombardy, 67/200, 33.5%) and in critical care settings (93; 51.95%) (Table 2).

Themes and subthemes

From the 380 narratives, a total of 2,510 quotes have been identified, categorized according to five themes: (1) 'Sharing what is happening within myself'; (2) 'Experiencing unprecedented working conditions'; (3) 'Failing to rehabilitate the image of nurses in society'; (4) 'Experiencing a deep change in my life'; and (5) 'Do not abandon us'. The most frequent theme was 'Sharing what is happening within myself' ($n = 891$, 35.5%), while the least frequent was 'Do not abandon us' ($n = 241$, 9.6%) (Table 3).

Theme 1. 'Sharing what is happening within myself'

Emotional up and downs and physical discomfort were the main lived experiences narrated by nurses. Among the former, nurses reported desolation and sadness, fear, powerlessness, a

Table 1 Italian epidemiological trends regarding COVID-19 and the number of narratives on a weekly basis

Dates	Increase of new daily cases, n°	Increase of new daily deaths, n°	Number of narratives, n°	Number of words, n°
23 rd to 29 th of February				
Weekly Summary	1049	29	12	4796
1 st to 7 th of March				
Weekly Summary	4012	204	10	3605
8 th to 14 th of March				
Weekly Summary	12 689	1208	35	15 160
15 th to 21 st of March				
Weekly Summary	24 931	3384	55	29 947
22 nd to 28 th of March				
Weekly Summary	27 384	5198	56	34 081
29 th to 4 th of March				
Weekly Summary	14 394	4583	74	44 076
5 th to 11 th of April				
Weekly Summary	11 995	4106	46	20 645
12 th to 18 th of April				
Weekly Summary	7502	3759	35	20 188
19 th to 25 th of April				
Weekly Summary	-1924	3157	26	14 741
26 th April to 2 nd of May				
Weekly Summary	-5143	2326	31	15 387
Total	96 889	27 954	380	202 626

Source: Ministero della Salute (2020). Report giornaliero – Mappa interattiva Italia Covid-19. Retrieved from: <https://opendatadpc.maps.arcgis.com/apps/opsdashboard/index.html#/b0c68bce2cce478eaac82fe38d4138b1>.

sense of insecurity, anxiety and anger: all negative emotions, leading to exhaustion:

Some days you feel like a lion, other days you think you have reached that point called the end. (IM5, N24-11, NT13)

Alongside emotions, the physical discomfort is experienced as hard due to the length of shifts, the lack of personnel and the need to wear PPE, making their faces bruised, marked and unrecognizable:

It feels like a train hitting you. (NT36)

Both of these factors increase the vulnerability of nurses who might not be supported by their family, given that they isolated also inside their home so to protect them from potential infection:

Table 2 Profiles of nurses according to the narratives included

Demographic variables	N (%), average (SD, ±, range)
Gender	
Female	219 (60)
Missing	9 (2.4)
Age (years)	35.3 (±9.2, 22-55)
Missing	332 (87.3)
Italian regions	200/380 (52.6)
Lombardy	67 (33.5)
Emilia-Romagna, Italy	26 (13)
Veneto	15 (7.5)
Puglia	15 (7.5)
Piedmont	11 (5.5)
Marche	11 (5.5)
Campania	10 (5)
Tuscany	9 (4.5)
Lazio	8 (4)
Liguria	8 (4)
Sicily	7 (3.5)
Abruzzo	5 (2.5)
Friuli Venezia	3 (1.5)
Calabria	2 (1)
Sardinia	2 (1)
Basilicata	1 (0.5)
Missing	180 (47.4)
Ward/Unit	179/380 (49)
Hospital	
Critical Care	93 (51.9)
Non-Critical Care	63 (35.1)
Outpatients units	4 (2.2)
Community care	
Nursing Home	17 (9.4)
Home Care	2 (1.1)
Missing	186 (51)

n, number of people who reported data; SD, Standard Deviation.

Infecting them has strong psychological repercussions. (ACN1)

As a consequence, nurses suffer a more severe social isolation, which increases further their emotional frailty:

I miss him so much, when I get home from work, I fall into depression. (ACN8)

All posts called for a great energy to cope. However, nurses reported feeling proud because they perceived the value of their work:

Table 3 Themes, subthemes, and number of quotes

Themes	Subthemes	N = 2510 (%)
Sharing what is happening within myself	Total	891 (35.5)
	Experiencing emotional ups and downs	276 (31)
	Dealing with physical discomfort	267 (30.0)
	Protecting my family	240 (26.9)
	Feeling proud	81 (9.1)
	Being a person under the mask	27 (3.0)
Experiencing unprecedented working conditions	Total	749 (29.8)
	Caring for terrified patients and families	243 (32.4)
	Working in a changing environment	137 (18.3)
	They are playing with our lives	205 (27.4)
Failing to rehabilitate the image of nurses in society	Resisting and resisting	164 (21.9)
	Total	376 (15)
	Being just a nurse, not a hero, nor an infector	294 (78.2)
	Remembering and still experiencing aggressions	33 (8.8)
Experiencing a deep change in life	Despite everything, still devaluated	49 (13)
	Total	253 (10.1)
	Living in fear for colleagues: I'm with you	116 (45.9)
	Changing sides: becoming a COVID-19 patient	35 (13.8)
	Impressing this experience in my life	82 (32.4)
Do not abandon us	Thinking of my future: Staying or leaving?	20 (7.9)
	Total	241 (9.6)
	Living in a surreal drama	83 (34.4)
	Experiencing a war on the frontline	50 (20.8)
	Calling for help: Please stay at home	108 (44.8)

N, total number of quotes extracted.

... our work is great ... (N24-42)

And also, because they have the unique opportunity to learn:

... We ... we wrote pages and pages of a great book; we were the astronauts in a moon sky. (NT-FB104)

In their perception of themselves as 'strangers', they recognized themselves as frail, vulnerable, weak, defenceless human beings underneath the masks, feeling pressured into hiding negative emotions and tears, and considered the mask a feeling pressured into hiding?:

Under the mask that we must wear, there are skin, eyes and a heart. (ACN23)

Theme 2. 'Experiencing unprecedented working conditions'

Nurses reported facing unprecedented working conditions, described mainly as caring for terrified patients and families, in changed environments characterized by a lack of human and material resources: in this context, they try to resist.

Patients cannot see their loved ones and are forced to live through the disease alone and afraid they will never see their families again. Nurses are felt to be the unique human contact for each patient and encumbered by the difficulty of alleviating suffering and loneliness:

I can hold the hand of a dying patient, but I am not the daughter, I am not the husband, I am not the wife. (NTv1)

Hospitals have been completely revised in their layouts, in an unprecedented transformation in terms of both speed and changes:

A transformed department, completely new. (NT11, N24-4)

Nurses reported having been deployed from one unit and introduced into a new unit devoted to COVID patients without appropriate preparation. The perception of being sent to the frontline without the required resources and of not being protected by the system also emerged, especially at the beginning of the outbreak:

We do not have personal protective equipment, we lack masks, we lack gowns. (ACNv3, NT40)

Moreover, the lack of nursing resources, both in quantity and in quality, is evident in narratives reporting the involvement of novice nurses in complex environments with no adequate preparation and mentoring, generating the diffuse perception of being under-protected and under-supported by organizations. In response, nurses reported feeling tremendously alone and trying to resist:

We cannot give in to fear, despair and fatigue! (N24-17)

Theme 3. 'Failing to rehabilitate the image of nurses in society'

According to the feedback received from individuals (patients, families) and the entire society (public expressions), nurses perceived themselves as angels and heroes, receiving gifts, flowers and food during their shifts, and receiving the gratitude of patients thus, with a perception of a sense of recognition for their work. Nurses highlighted how they appreciate this positive feedback in the hope that it might eradicate the negative stigma created by those who before the pandemic committed verbal and physical aggressions, especially in emergency departments:

For two months, those people who before COVID-19 threatened us verbally and physically have been calling us heroes. (ACN37)

However, during the COVID-19 outbreak, a part of society accused nurses of being plague spreaders:

We are not heroes, but neither are we criminals. We were and we are only nurses. (N24-1a)

As a consequence, nurses reported a substantial failure in the desired rehabilitation of nurses' reputation in the community. They perceive their profession as still underestimated and devalued, and hope that their sacrifices and efforts will not be forgotten at the end of the pandemic, especially when it comes to providing adequate nursing staff in the units and paying an appropriate salary.

Theme 4. 'Experiencing a deep change'

Nurses narrated experiences of profound change in their personal lives: they reported being afraid for colleagues, trying to protect each other, and experiencing a sense of solidarity and collaboration never felt before:

They [colleagues] are now your closest family. (ACN21)

Supporting full compliance with recommendations and being continuously aware in respecting appropriate behaviour not only for themselves but also for colleagues was the first main change described. However, despite this attention, nurses described what it was like to be a patient, 'changing sides':

The feeling of being a plague spreader, as if contracting COVID-19 was a fault. The fear of making people worry. The fear of being a culprit despite all the efforts made. (NT60)

Apart from concerns about health conditions, nurses also shared their worries about being considered responsible for not having applied all recommendations and for having spread the virus inside the team. All of these experiences triggered well-impressed changes in their ways of thinking and live:

We will carry this experience with us, our eyes will show the pain we have seen. (ACN13)

Some nurses also reported having reconsidered their future in nursing, implying that they considered quitting the profession in the post-COVID-19 period given its strong impact.

How COVID-19 leaves us: aged, ugly, afraid, but also stronger, more visible in society, more aware of our possibilities, more vulnerable and frailer. (NT-FB24)

Theme 5. 'Do not abandon us'

Nurses described themselves as experiencing a surreal drama or a war on the frontline. The extreme difficulties of the working conditions have been reported as seeming unreal:

I am in the room and I have just punctured a huge bubble, I no longer perceive time, I do not hear anything of what happens outside. I seem to be in another dimension, to have landed on another planet. (NT10)

On the other hand, nurses perceived themselves as fighting an enemy:

... sent to the frontline to fight an enemy that is stronger and more prepared than we are. (ACN22)

In both worlds, the surreal and the warlike, nurses shared their increased vulnerability and their need for help, calling for a collective responsibility:

... not to leave us alone in this adventure. (ACN3)

In this context, social media became a sort of medium for educating all citizens to 'stay at home'.

Discussion

We have considered narratives written during the first wave of the COVID-19 outbreak (Ministero della Salute 2020), as reported on five Italian professional websites. The occurrence of these narratives was limited during the first week and increased over subsequent weeks both in frequency and in number of words, suggesting – as emerged from the significant correlations – nurses' need to share their lived experiences as the intensity of the pandemic increased. Individuals suffering from intense stress and traumatic experiences have been documented as using social media to convey authentic narratives, as a form of self-care activity (Salzmann-Erikson & Hiçdurmaz 2017). However, with an average of five posts per day in five sites, the intensity found was inferior to that documented in Brazil, as collected from Twitter and Instagram, where more than 15 appeals per day were documented (Forte & Pires de Pires 2020).

Around half of the narratives included personal details (e.g. of age, gender, unit) suggesting the willingness of nurses to forego anonymity. When available, the writers' profiles were similar in terms of gender and slightly younger than the sample of nurses documented nationally, probably due to the higher familiarity of younger generations with social media (Stevanin et al. 2018). In light of the power of social media to function as a self-care activity (Salzmann-Erikson & Hiçdurmaz 2017), discovering strategies used by mature nurses might be useful to address their need for support.

Nurses used social media mainly to share their intense emotional discomfort and physical symptoms, caused by increased workloads and prolonged use of PPE, as already documented (Kang et al. 2020; Khanal et al. 2020). Negative emotions (e.g. anxiety, helplessness), due to the risk of being infected and the fear of making mistakes or not doing enough for patients, have also been previously documented (Sun et al. 2020; Tan et al. 2020). The fear of being infected or infecting their loved ones lead nurses to further isolate themselves; as a consequence, alongside the forced isolation due to the lockdown at the national level, which has substantially hindered family reunions, nurses have imposed on themselves a more severe isolation. Moreover, while nurses seem to be proud of the important contribution they make to society as a whole, they appear to feel that they lose their right to be human and to enjoy even familial relationships; this seems to be why they claim the right to be considered a human being under the mask. The further restrictions on family contacts might increase their depression and psychological distress (Ornell et al. 2020), and should be considered with care in both the short and long term.

The changes in patients' and patient families' profiles, in terms of the dramatic increase in the need for emotional

support, as well as the modifications in the layout of the units and the staff, characterized by limited resources and limited training (Danielis et al. 2020), have been reported as being unprecedented. In this unique experience, nurses perceived that the health care system has not supported and protected them and that they have been left substantially alone in their attempts to resist. Nurses have been reported as 'resisting' in previous studies as well, as they considered risk an integral part of their work (Koh et al. 2012; McMullan et al. 2016). This confirms the need to improve preparedness for public health emergencies (Tan et al. 2020) alongside the establishment of an open ethical debate to prioritize the ethical demands of this unprecedented event as much as treatment and management concerns (Sese et al. 2020). Moreover, in order to consider nurses' needs, it is important to allow them to express their discontent within the organization, even during a pandemic. Recommendations to health professionals to avoid violation of ethical principles and norms through their use of social media (e.g. Demiray et al. 2020) have been established in several countries and institutions. Therefore, a debate regarding the possible implications for nurses who are not allowed to express their needs inside the organization, and who are also forbidden to express concerns via social media or other outlets, should be opened when the issues affect public health.

The true value of nursing has been documented as being celebrated by politicians and the public during the COVID-19 outbreak (Catton 2020b). However, according to the nurses' narratives, this great occasion for appreciating the nursing profession seems to be lost. Nurses appreciate that their public image has improved, but they reported episodes of stigma where they and/or their families have been considered a potential source of infection. In other words, their memories reverted to the aggression experienced in their professional lives, and despite the newly acquired, apparent importance, they reported being attacked and undervalued. Therefore, nurses did not perceive their role to be effectively valued during the outbreak. It should be underlined that, based on an analysis of the front pages of Italian and Spanish newspapers to determine how the COVID-19 crisis has been represented, healthcare personnel have been reported in only 6% of cases, resulting in lower visibility than politicians, public figures and anonymous citizens (Tejedor et al. 2020).

Inside the team, solidarity and collaboration between nurses have been reported as increasing in the endeavour to protect one another. When nurses changed sides and became patients, they felt stigmatized again and in fear to be a source of infection. On the one hand, the COVID-19 experience seems to have broken down many barriers to team collaboration (e.g. Becher & Visovsky 2012); on the other, this

emotional closeness with colleagues breaks again when a nurse becomes a patient. The complexities of the emotions affecting the personal and professional life as permanent learning experiences and the profound changes nurses have made in their lives have led them to reconsider their future in the profession. This might express a profound professional exhaustion that should be carefully considered in order to prevent further loss of nurses.

Nurses described their experiences during the COVID-19 pandemic as a war or a surreal drama: the battle against the enemy and the 'common front' composed of professionals, families and patients have both been identified as common concepts (Marron et al. 2020). However, the use of this concept has been recently questioned (Varma 2020), because the pandemic-war analogy has been considered both dangerous *and* wrong, since pandemics require collective, concerted and coordinated responses, whereas wars divide people. Moreover, although the metaphor of war might help people to understand the gravity of the situation, on the other hand, it assumes that there are favourable conditions for 'fighting', such as an adequate number of health care providers, a national strategy and the availability of PPE. Thus, the 'war' metaphor has both positive and negative effects on health workers: the risk they run is recognized and they look like heroes, but this recognition leads them to bear the weight of fulfilling expectations. In this war, nurses felt very lonely, helpless and weak, overwhelmed by intense emotions but still proud. Throughout this loneliness experience, similarly to their Brazilian colleagues (Forte & Pires de Pires 2020), they call for help from all citizens, asking them to 'stay at home', suggesting that professional social media can be a medium via which to increase compliance with public health recommendations, in which nurses might play a great role.

Limitations

The study has several limitations. We have considered narratives posted by Italian nurses only on some professional social media platforms, excluding, for example, Twitter; the resulting experiences could not be generalizable as they refer only to nurses who are familiar with social media and who were willing to 'expose themselves' publicly. Moreover, we assumed that narratives were published by Italian nurses given that these were written in Italian and posted in Italian websites; however, no systems to assess effectively post provenience (e.g. if Italian or not) was performed. Along this line, in the complex process of identifying eligible narratives, when a narrative was not explicitly reported as written by a nurse, an analysis of the text in its consistency with the nursing practice was performed by two researchers; however,

some errors might have occurred. Furthermore, in the attempt of describing the profiles of the nurses who posted the narratives, an analysis of the contents was performed; however, the significant amount of missing data hinders a full description of the population. In addition, each narrative was considered individually, without any attempt at linking them to each other (e.g. interconnected 'posts'); future studies should consider this challenge of identifying relationships between posts.

Conclusions

According to the findings, posts touched four dimensions, namely, individual, professional, related to the healthcare institution(s) and related to society. Nurses shared their experiences of an intense emotional and physical discomfort, worsened due to the fear of infecting their families, which led to further social distancing to protect their loved ones. At the professional and organizational levels, nurses reported witnessing unprecedented experiences, really demanding. In this context, trying to resist.

The health emergency was experienced as warlike and surreal, where it was necessary to adapt quickly to conditions never experienced before, both in terms of organization and of patients' complexity. This hard and intense experience has also brought gratitude and value, improved ability to work in a team, and professional growth, which hopefully will not be forgotten when the emergency is over. However, despite the great occasion for recognizing the role they play, nurses reported being still undervalued: alongside their memories regarding aggressions before the COVID-19 outbreak, they reported episodes of new aggressions and stigma where citizens considered them as disseminating the infection.

Implications for nursing practice, nursing policy and health policy

Four implications should be considered in order to prepare the healthcare system for the second wave and future outbreaks, in light of what this experience has taught. Firstly, nurses should be better supported in their efforts to cope with the high psychological impact of outbreaks, by considering with care their mental health concerns and by offering counselling and support so as to avoid traumas and long-term effects. The revealed intention of leaving the profession should be monitored and managed to prevent exacerbation of the already dramatic nursing shortage. Secondly, valuing the contribution of nurses on this occasion and, in general, should be considered a key policy addressing the need for further and better working conditions. Third, ethical implications emerged from the lived experiences shared by nurses

with the public should be discussed: creating occasions inside the organization to openly discuss issues might address preemptively emerging problems as well as prevent important negative consequences. Fourth, alongside a cultural investment of citizens in recognizing the role that nurses play, a no tolerance strategy with regards to aggression should be established at international, national and regional levels.

Author contributions

Study design: RF, AP, JL

Data collection: RF, EV, DC, AP

Data analysis: RF, EV, JL, GR, DC, AP

Study supervision: AP

Manuscript writing: RF, JL, GR, AP

Critical revisions for important intellectual content: AP.

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Supporting information

Additional Supporting Information may be found in the online version of this article:

Table S1. Consolidated criteria for Reporting Qualitative research - COREQ (Tong et al., 2007).

Table S2. Rigour and trustworthiness (Sandelowski, 2000; Vaismoradi et al., 2013).

Table S3. Coding tree: examples of the data analysis process.