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Taking care. Nursing towards Covid-19 patients during the pandemic emergency in Italy: a qualitative study

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Abstract. *Background and aim of the study*: The Covid-19 pandemic has clearly impacted the Italian healthcare system. The growing number of patients in critical conditions has required a reorganization of the hospitals wards and of other healthcare structures, by changing the working routines of health professionals. The aim of the study is to explore if and how the nursing care towards Covid-19 positive patients have changed during the pandemic. *Method*: Qualitative study with a phenomenological approach conducted through semi-structured interviews. Interviews have been carried out during the months of October and November 2020. Our research involved 21 nursing professionals attending post-graduate courses at the Department of Medicine and Surgery of the University of Parma (academic year 2019/2020) and who have worked during the pandemic period in health services structures and organizations. *Results*: The interviews showed how, during the period of the pandemic emergency, the care relationship between nurses and patients has changed because of the priority given to clinical and technical practices, in some cases, "life-saving". This happened due to different factors such as the nurses' fear of being infected by the virus and the lack of a sufficient time to ensure an holistic and integrated approach towards an increasing number of patients in highly complex conditions. Thus, the dimension of caring has been consciously overshadowed. *Conclusions*: The health emergency that has hit Italy since the first months of 2020 has shown structural limits and gaps of public health policies, hospital settings and national health services organization that already existed in the pre-pandemic period. It also highlighted how, even before Covid-19, nursing was already in part denoted by a loss of caring, a *missed nursing care*.

Key word: Covid-19, nursing, caring, missed nursing care, emergency, pandemic, qualitative research.

Introduction

The novel coronavirus (SARS-CoV-2) was initially identified in Wuhan (China) on 31th December 2019, but at the beginning of 2020 new cases were recorded in other countries. The virus has led to a health emergency, it has represented and still represents a threat for the entire world. At present, the virus has infected 148.999.876 people in the world by causing 3.140.115 deaths (1). The number of confirmed and suspected cases of Covid-19 is constantly increasing, as well as the number of deaths; however, a significant increase in the number of recovered patients is recorded (2). In Italy, the first national outbreak was identified on 20th February 2020. To date, 3.962.674 cases confirmed by molecular or rapid Covid-19 test have been reported and 119.238 deaths have been counted (1).

With the rapid spread of the pandemic, several national health systems have showed an inability to respond to this emergency. Therefore, standard public health's measures, such as lockdown, isolation, quarantine, social distance and community containment, have become necessary. The high number of infections and the initial lack of either effective medical treatments (drugs and medications) or vaccines have led to a significant increase of Covid-19 cases in intensive care unit and infectious disease hospital wards. The growing need of hospitalization has required a reorganization of the existing hospital wards, the establishment of temporary wards and the recruitment of an important number of healthcare professionals. The emergency situation has had a strong impact on healthcare professionals. It has also highlighted structural and welfare deficiencies of the Italian healthcare system, even before the Covid-19, such as the high workload and personnel shortage.

Caring and missed nursing care

The employment of nurses in intensive care units or in hospital areas and wards dedicated to Covid-19 positive patients has strongly increased during the pandemic. If, in the therapeutic relation with the patient, it is important to balance the technical aspects with the caring (3), the assistance of Covid-19 positive patients has maybe led the professionals to focus their attention on the clinical aspects. As a consequence, a high technicization of the cure occurred. Moreover, nurses felt not prepared from a cognitive and experiential perspective to treat patients with severe respiratory failure due to Covid-19 (4).

This has led to a missed nursing care or a postponement or omission of the nursing performance. The concept of "missed nursing care" has recently emerged even if it still remains an undiscussed topic; its causes are multiple among these the increased need of assistance, the lack of human resources, time and shortage of medical materials are the most prominent. In addition to the organizational factors, there are also other factors related to a not correct nursing planning, from the clinical judgment of the nurses and the work of the support staff (5). The rapid spread of Covid-19 and the significant number of patients in critical conditions have accelerated the change of the care relationship between nurse and patient. By "care relationship" we mean here the global care of the assisted person who requires an integrate intervention, in order to respond, in a personalized way, to all the needs. Taking care consists in respecting the patient and the bio-psycho-social needs, mediating between the patient, family members and other professionals, acting as a spokesperson for the patient's will, respecting his/her time and dedicating quality time (7). It means also supporting the person in the elaboration and expression of difficulties, desires, fears, doubts, expectations for the future, and trying to offer some answers to these manifestations, by making the patient responsible for his/her own care process.

Therefore, taking care is considering the patient's lifestyle and what the state of health and disease means from the patient's own point of view (8). Care is not simply a set of theories, attitudes or actions, but it is determined by the way in which professionals specifically use their knowledge and skills in the relation with the assisted person. The relationships between professional and patient is what determines the conditions of trust that allow the construction of the therapeutic alliance itself. Care is therefore based on the caring relationship, in which, in addition to the "to care", also the "to cure" becomes fundamental (9). This latter term involves a complete attention to the person and to the different dimensions that characterize the illness experience. This concept is anchored to the definition of health provided by the World Health Organization (WHO) (10) where the "health" does not correspond to the mere absence of disease but to a state of complete physical, mental, psychological, emotional and social well-being. Hence, the concept of caring can be defined as the true essence of nursing: without care there can be no cure and vice-versa (11).

Method

Aims

Based on the previous considerations, the aim of this study is to investigate if nurses, during Covid-19 emergency – and particularly in the first and in the

second waves of infections in Italy (March 2020/June 2020 – September 2020/November 2020) - have perceived changes in the nursing care provided to Covid-19 positive patients.

Given the difficulties related to the situations experienced within the hospital wards or health facilities, the study focuses on the changes perceived in terms of caring and care relationship, as well as the nurses' inability to guarantee the care they would have provided in a normal situation.

Study Design

The research consists of a qualitative study, with a phenomenological approach, conducted through semi-structured interviews. The phenomenological approach has allowed to approach the experiences of each interviewed nursing professional, by giving space to the different subjectivities. Starting from Husserl, Heidegger, Mearleau-Ponty and Gadamer reflections, the phenomenology develops as a movement of thought whose main objective is the investigation of human phenomena as they are experienced by the social actors (12), by suspending the researcher's judgment (13, 6).

The phenomenological approach allows to analyze the phenomena starting from individual and subjective representations, by considering the sense and significance given to particular events or fact that has to be exanimated. In this study, the phenomenological paradigm allows to investigate if, during the pandemic period, the care relationship with Covid-19 positive patients changed, starting from the different perspectives and experiences of the nurses interviewed.

Participants

In October and November 2020, some professional nurses were recruited.

Through a convenience sampling, nurses who met the following two inclusion criteria have been chosen: 1) having at least one year of work experience; 2) having worked in critical area hospital wards or in other departments/facilities re-organised for the treatment of Covid-19 positive patients. The exclusion criterion has been the refusal to participate at the research. The study involved nurses attending post-graduate courses at the Department of Medicine and Surgery of the University of Parma (post-graduate courses in case-care management, infection control, critical care nursing, teaching and learning strategies, palliative care and risk management), during the academic year 2019/2020. Nurses were invited to participate via official email and communication with an explanation of the research topic, the interview setting and modality. A total of 21 professional nurses (18 women and 3 men) were interviewed. Participants' data are shown in Table 1.

Instrument

A semi-structured interview resulted to be the most suitable tool in order to explore the nurses' experience in relation to changes occurred due to the health emergency. The use of the interview guide (see Table 2) has allowed to deepen elements and issues that emerged during the interviews, by giving space to each nurses' experience. The questions of the interviews included 3 sections aimed to explore: 1) *the professional figure*, investigating the experience of the nurses interviewed and the reasons that led them to choose their profession; 2) *the caring dimension*, investigating the interviewee's point of view regarding nursing care treatments and the concept itself of the "taking care"; 3) *Covid-19 and of the changing in nursing care treatments*, exploring if and how Covid-19 has impacted on caring during the pandemic emergency. During the interviews, personal data have been also collected. The interviews lasted between 40 and 60 minutes.

CM drew up the interview guide while the interviews have been conducted and recorded by six researchers (RC, SEC, VL, KN, LF, CC) both in presence and using video conference platforms (n. 8 in presence and n.13 in video call). All researchers are professionals from medical anthropology, medicine and nursing fields with experience in qualitative research methods and leading interviews.

Data analysis

Prior to participant consent, each interview was recorded, transcribed verbatim and then analyzed with

Table 1. Study participants

Code	Gender	Age	Years of work	Working units during Covid-19
1	F	30	7	Orthopaedic Unit
2	F	23	1	Intensive Care Unit
3	M	31	7	Emergency Room - 118
4	F	24	2	Geriatric Unit
5	F	29	5	Rehabilitation Medicine
6	F	32	8	Extended Care Unit
7	F	25	2	Medical Unit
8	F	46	17	Intensive Care Unit
9	F	27	2	Emergency Room
10	M	24	2	Extended Care Unit
11	M	29	6	Extended Care Unit
12	F	24	3	Emergency Room
13	F	26	3	Medical Unit
14	F	24	2	Medical Unit
15	F	24	2	Intensive Care Unit
16	F	25	3	Emergency Medicine
17	F	26	3	Intensive Care Unit
18	F	23	2	Covid-19 Ward
19	F	28	1	Orthopaedic Unit
20	F	25	2	Medical Unit
21	F	25	1	Emergency Room, Intensive Care Unit, Check-in test Covid-19

respect to thematic content. Transcriptions have been read several times, in order to grasp the deeper meaning of the study participants' experiences and the overall meaning of the interviews.

The thematic analysis method has been chosen to infer data from textual material (14). Researcher followed the six phases of thematic analysis as described by Braun e Clarke: (a) familiarize with data; (b) generating initial codes; (c) searching for themes; (d) reviewing themes; (e) defining and naming themes; (f) producing the report.

The first analysis step implied an accurate reading of verbatim transcripts.

Through an inductive method of analysis, from the textual material have been identified meaning units, such as common words or statements that participants used frequently to describe relevant issues. These have been subsequently summarized while maintaining the expressions of the participants as much as possible, before being coded in an analysis grid shared by the research group. The meaning units have been grouped into common themes. This allowed the identification of sub-themes which were then grouped into more inclusive themes. All researchers (CM, RC, SEC, VL, KN, LF, CC) compared the data obtained and sought agreement. Two external researchers (GA and LS) analyzed and supervised any disagreements.

Ethical considerations

All participants were informed of the purpose of the study and received a clear and informative document, explaining design, aim, and procedure of the study.

The informed consent has been approved by the Data Protection Service (DPO) of the University of Parma. The nurses who signed the consent have been informed that participation in the study was voluntary and that they could withdraw their consent to participate at any time. The document also stated that the interview would have been audio-recorded, if carried out in person, or video-recorded. The data collected has been reserved and used in compliance with the current legislation on the protection of sensitive data and privacy regulations.

Results

Three macro-themes were analyzed: *the principles that characterize the nursing profession*; *the characteristics of the caring*; *the impact that Covid-19 had on nursing care and on the care relationship.*

1. The principles of the nursing profession

Starting from the interviews, it emerged that the nursing profession is governed by technical and human principles which together constitute the "knowing how to be" and "knowing how to do" that guide the professional in assistance. The technical principles include

Table 2. Interview guide

Thematic area	Questions
Professional figure	Why did you choose this profession? What do you think are the fundamental principles on which the nursing profession is based?
Characteristics of caring	What does "take care" of patients mean to you? Which are the principals action that nurses have to guarantee in the relationship with the patient that needs assistance and support?
Covid-19 and caring	How has Covid-19 affected caring and care gestures towards patients? During the period of the health emergency, did you ever feel unable to ensure all the assistance that the patients needed? During the Covid-19 emergency, how did you managed the situation in the hospital unit/ward in order to ensure to each patient the necessary assistance?
Personal data	Age Gender Profession Current working unit Years of work experience Working unit during Covid-19 pandemic

the essential knowledge for the nurse, the toolbox useful for clinical knowledge about the patient.

This knowledge allows to "*have objectives ... therefore to know ... what you are doing and what you have to do, what is the patient's clinical history, what is the goal that the patient must achieve and that he must achieve thanks to you*" (Code 15.7); it is therefore the "*knowledge of everything, whether it is the knowledge of the pathology, the knowledge of the consequences or of the symptoms and signs that can lead to this disease; or, simply, knowing how to manage it*" (Code 9.2).

However, the theoretical knowledge and technical skills are integrated with the nurses' relational skills, with the ability in taking care of the whole person through a holistic approach. In this sense, there is no complete assistance without having recourse to the "human" principles that regulate nursing practices. These principles characterize the relationship with the patient, a relationship made of empathy, active listening, attention. From other interviews it emerged that the nurse is "*an all-round professional, in the sense that one must take full care of the patient and therefore not only from a clinical point of view, but also from an emotional point of view*" (Code 12.1), "*avoiding prejudices against people*" (Code 4.1), to guarantee the respect of patients to treat them *"fairly* [without] *making discrimination and* [without] *judging from what their history may be*" (Code 13.7). Guaranteeing a good care thus means *"being expert from a medical and human point of view*" (Code 21.1), "*being predisposed to the other, especially considering that the other* [person] *is in a difficult condition* [...] *estranged from his usual environment, probably* [...] *frightened by what he is going to face with and that* [...] *needs closeness and proximity*" (Code 1.2). In this sense, the profession is based on how to establish a caring relationship with patients rather than knowing how to operate only on their purely clinical situation.

2. Caring in the nursing profession

A second theme that arose from the interviews concerns caring and its different facets that characterize the relationship between nurse and patient. Caring is considered by the interviewees as the essence of the profession because it allows the nurse to take care of the person not only "technically", by considering his/

her pathology, but also from a personal and relational point of view. As an interviewee states: "*Taking care means taking charge of everything* [of] *a patient with his own history, his own experience, his own anamnesis and taking care is precisely to dig deeply into the patient, into his experiences even in his traumas* [...]. *Taking care means not curing the pathology, but also curing, in quotes, the patient's soul*" (Code 18.23; Code 18.25). The care relationship is expressed in the attention paid to the patients and their needs, in listening to them, in closeness and full understanding of the discomfort or difficulty caused by the disease so that "*Once you have finished your work with him, he may get away from you enriched with something and not simply having received an intervention from you such as being medicated. He must have undergone a process that has led to feel better, this is taking care*" (Code 10.4). Being a nurse means trying through the one's work to make the illness experience less difficult, by opening "*small windows of serenity to the patient*" (Code 6.2), in order to improve its quality of life during the hospitalization.

3. The caring dimension during the Covid-19 pandemic

The Covid-19 pandemic has had a major impact on caring, by generating mixed feelings and sensations in nurses. The emergency situation, the limited time available to deal with the increasing number of patients, the re-organization of hospital wards and professionals work plans, are elements that have profoundly overturned nursing interventions, by undermining the care relationship between nurses and patients. In daily practice, nurses tried to give assistance to all patients, without being able to do it completely: "*When there were people, patients who were sick, a selection of who to treat more and who to treat less was made*" (Code 9.14). As an interviewee said:

"*You would find it difficult to manage, in only a few days, all those care needs that followed one after the other in a short time and moreover, being a new thing for you, you had little time to dwell on the emotional side of people and you had to pay more attention to not letting physiological parameters and objective data get worse. So let's say that in this period you had to focus more on the clinical aspect, by neglecting other aspects. This happened because of the emergency situation and because so many people were sick, in a short time you had to ensure that the physiological parameters were good and treat the clinical aspects. Therefore, unfortunately, we had to ignore other aspects*" (Code 10.8; Code 10.9). The sudden and radical reorganization of hospitals has led nurses floating to other wards and departments, by creating several difficulties related to the lack of experience of most of the healthcare workers towards a certain type of patients and in managing new medical equipment. This forced nurses to reinvent their work "*day by day, because it was a new thing, so the first weeks were a bit like: «let's try this and tomorrow we'll see how it goes, otherwise we'll do it differently»*" (Code 14.13); "*This created a very confusing work environment*" (Code15.15). It is clear that the resources' imbalance also affected healthcare professionals at a personal level, by leading them to develop fears of the uncertainty, by generating the perception that their job have been "*completely turned upside down*" (Code 1.20). The relationship with the patient has been altered: "*The relationship was no longer there, it was just a series of actions, everything* [...] *began to change and our care... during the peak, you didn't even know what patients looked like anymore. I know it's a very bad thing to say, but it's the truth*" (Code19.18; Code19.16). Patient, as human being, has been no longer the care focus. As an interviewee states: "*We couldn't listen to them the way it should be, the way this job requires, according to our principles*" (Code 13.7).

From the collected interviews clearly emerge that several patients suffered from an isolation condition and were seeking the proximity or closeness of nurses who were, however, unable to provide it because: "*the access to the patient's rooms had to be limited, the time we spent inside the room, even with full protective gear, had to be very limited. We had to complete our task and get out, and therefore many times… you realized that the person really wanted to talk* [...] *unfortunately we had to leave them right away*" (Code 13.5; Code 13.6). Nurses, therefore, have been often forced to leave their patients alone; this has been not only caused by a lack of time, but also because of the fear of the virus and of the possible contagion, along with the worry related to personal protection equipment (PPE) failure.

All these elements have led nurses to have brief interactions with patients, oftentimes only to complete essential tasks.

An interviewee stated: "*Using that face mask I didn't know if it would have protected me in that situation, so I preferred not to get close to the patient*" (Code 7.25). The use of personal protective equipment, which healthcare professionals had to wear in order to protect themselves from the virus, also had a strong negative impact on the relationship with the patients, as well as ventilators or other devices, such as helmets and face masks that patients had to wear to be properly oxygenated. A nurse, who worked in a critical care ward during the pandemic, describes how difficult it was to work with PPE: "*There was this limitation, this barrier... it was a barrier, affecting our communication*" (Code 21.5). All this led to a different kind of care towards the patients: "*It was different because, perhaps, we were giving less attention to details given that we had to prioritize the bigger picture. What I really mean* [...] *it was a matter of life-or-death*" (Code 2.7). Interventions oftentimes were limited to "*taking vitals and administering drugs*" (Code 6.14) since "*the situation required it, because it was really a life-or-death situation, and in this case, we had to prioritize the technical aspects, because we had to save lives*" (Code 2.14). These interviews extracts show how the healthcare emergency situation has forced the healthcare professionals to provide mainly a "technical care", in response of the needs of a very increasing number of patients; the nursing care with its relational aspects had to be considered less urgent because the patients were "*very sick, very unstable and therefore at any moment* [...] *you could be attending to a patient in a room and had to rush into another room because a patient was crashing*" (Code 20.14). Perceiving the loneliness of patients without being able to respond to their needs, has led some nurses to become even more detached from their patients, and to feel a strong sense of frustration, certainly due to the lack of knowledge about the infectious disease, but mostly connected to the lack of satisfaction of the patients. A nurse states: "*I tried to understand that my patient was away from his family, but then it started to almost bother me... I mean, the fact that I was someone he saw every day and I started to be his closest person... Because, actually, I had no time to humanize him and I only saw the disease he had*" (Code 9.17).

The work context destabilized most of the interviewees. Every single gesture, even the most obvious, has been characterized by fear, terror, helplessness and by the worry derived from not being able to perceive substantial improvements in patients; as stated by a nurse interviewed: "*you came home and you knew that, that patient, for that patient there was maybe nothing more to do and.... even if they were young patients... the next day you'd come in and you wouldn't find them there, and so it is clear that these things have an impact on you*" (Code 17.28). In addition to the awareness of not providing a quality care, there was also a sense of fatigue caused by the long, heavy working shifts and by the fact that: "*you went in and you didn't know when you would have come out*" (Code 15.29).

Discussion

During the pandemic emergency, nurses passed through an extremely delicate and complex period; technical knowledge and relational skills that usually characterize the care relationship have been put to the test. It emerges that during the most acute phases of the pandemic, it was difficult to guarantee a complete caring. The high number of patients, their critical and complex situations put in the foreground other actions (such as the constant monitoring of vital parameters, the administration of therapy, the management of machines and devices). Therefore, little space has been left for the primary care (for mobilization, renewal of medications, help in feeding or personal care etc.).

However, above all, it has been difficult to guarantee an integrated approach to the patient, capable of placing him or her at the center of the clinical and therapeutic pathways by taking into account his or her needs, expectations and requirements, and therefore the illness experience in its complexity. These considerations also emerge in the recent literature on the subject (15, 16, 17). In this sense, during the emergency situation, ample space has been given to the management of the disease, such as understood as an organic dysfunction of the body that has to be treated through medical/technical interventions, rather than understood in terms of illness and the patient's experience of the disease (18, 19).

Nursing care requires both a technical and a relational dimension (20). The gap between the desire to put in place an adequate care and the impossibility, given the conditions, of being able to do it, has caused great stress for nurses (17). Changes in the

caring relationship presumably occurred not only during the Covid-19 period, but also in other emergency situations, or during other pandemics such as SARS in 2003 and Ebola virus in 2014 in Africa (21, 22). During these situations, several nurses have to prioritize predominantly "life-saving" treatments (23). The reorganization of the nursing care occurred even in the context of the Covid-19 pandemic; given the severity of the clinical situations of most patients, some practices have been excluded.

The data collected from this study confirm findings in the literature: the "tacking care", a core concept of nursing framed as a central element of the patient-centered medicine, has given way to life-saving technical interventions. Caring is considered essential in nursing as it positively influences the perception of care in patients (24). The relationship is fundamental, in which the first protagonist is the person assisted, since he or she is the only expert on his or her illness (25). However, during the interviews, caring has not been defined in a univocal way: the nursing approach emerges as different and personalized according to the specific situation, or the type of assistance that patient requires. This leads to a surfacing of multiple definitions and examples of caring.

There is not a precise time or a specific moment in which the nurse can uniquely provide caring: this time is necessarily included in the execution of acts and maneuvers, such as the execution of a blood sample, a medication, the administration of therapy.

Interviews showed the awareness of nurses who find themselves in front of patients with particular backgrounds and different way of reacting to the disease that represents a difficult moment in life, and how this must be considered in order to give a personalized and proper support.

Interviewees answered questions on their vision of caring with examples based on their everyday professional experience, by referring to particular moments during which they "practiced" this fundamental concept, by reporting their previous personal experience based on the relationship with patients. The pandemic altered this relationship by distancing physically, emotionally, and psychologically nurses from patients.

The professionals have felt the need to connect with patients but they have been unable to meet this need in a way they would have wanted in a normal situation.

The pandemic made it difficult to give a quality nursing assistance (4). This seems to be confirmed by the nurses interviewed, by their fear of getting sick, the worry of having little technical and practical knowledge, limited time at disposal combined with the high workload, the complexity of the disease, the constant patient turnout.

Nurses changed unwillingly their approach to patients: they have entered in the patient's room less than usual by putting in place all the necessary personal protection equipment (26). As stated in the literature (4, 27), the pathology itself and all the consequent difficulties encountered in the hospital wards, have caused anxiety and insomnia in nurses.

Conclusions

This study tried to give voice to several protagonists of this health emergency. The pandemic has surely transformed nursing assistance and care contexts. On the other hand, it is possible to note that a certain crisis in nursing care had already been observed even before the Covid-19 pandemic. This is especially related to the discrepancy between the "ideal" nursing care and the care that is actually practiced in work contexts characterized by poor organization, high workloads and lack of resources and sanitary personnel. The so-called *missed nursing care* - or the inability to provide a full nursing assistance - could have been found in some context and situation before the pandemic. This occurred because the willingness of the nurse to establish the "ideal" relationship with the patient collides with multiple factors, such as time, work organization and care loads. These factors usually hinder the relation with the patient. Difficulties associated with working in poorly organized environments with excessive workloads and reduced personnel, led nurses also in the past to experience situations of high stress or even burnout (26). These complications, exacerbated from Covid-19, can lead to consequences on the general health and outcomes of patients (28). Therefore, in a context where caring is not possible to provide, patients feel frightened, weak and perceive a slowdown in the healing process (24). From the interviews conducted and from literature (4), it emerged the importance of a better organizational management of the

hospital wards and of the adequate supply of the crucial resources for the patient management, in order to be ready for a possible future maxi-emergency event such as the one experienced in recent months. Recent studies on the pandemic phenomenon (29, 30) suggest increasing the nurses' personnel, promoting the collaboration between sanitary professionals, and training nurses - including those of non-critical departments - to the complex techniques of the intensive care areas. The latter aspect has been strongly emphasized in the interviews conducted for this study: several nurses felt unprepared on theoretical and technical knowledge to manage patients with severe respiratory insufficiency due to Covid-19.

The phenomenological approach seemed to be the most appropriate in order to undertake this research. Interviews were carried out with a sample of a limited number of health professionals, but at the same time varied since it has been composed by professionals who have worked in residential care facilities, or in critical care wards, or even in other hospital wards reorganized for treating critical patients. This permitted to collect a wide range of testimonies and to observe how clinical settings completely changed in their organization and functioning during the pandemic period. For instance, health professionals working in residential care, where patients' clinical and social/family needs are normally taken into account in a caring perspective, had to focus on a purely technical care, strictly related to the patients' clinical situations.

Other interviews showed how in hospital wards - where family members were not admitted and where critical patients with breathing difficulties felt lonely and frightened – nurses were considered as leading figures, in terms of reassurance and comfort.

The difficulty in handling the patients' requests was not caused by the unwillingness of the professionals but it has been determined by some factors that changed the relationship with patients namely the use of medical devices and equipment, the fear of contagion, the exponentially increased workloads, all elements to which professionals referred during the interviews. This caused discomfort in nurses.

If, therefore, the heterogeneity of the nurse's workplaces allowed us to have a diversified overview of the phenomenon, on the other hand it did not permit to deepen the specificity of the collected data. Indeed, the relationship with the patient is different for each care setting. So, for example, the relationship with a patient treated in an intensive care ward is different from the relationship with a patient treated in a residential care ward. In the first case the patient is often sedated, unconscious and with a severely compromised clinical picture; in the second case the patient is often awake and aware of what is happening. Caring therefore diversifies into different gestures and relationships, depending on the situation experienced by the patient. In clinical settings where the patient is often unconscious, it is also necessary to establish a relationship with the caregiver, who refers to the nurse in terms of help, support and education. This relationship changed during the pandemic period due to the access' prohibition of family members to the hospital, by leading nurses to replace the caregiver figure in the care relationship with the patients. Further studies and research could better deepen the analysis by differentiating more the various care settings.

The experience of Covid-19 pandemic could provide an opportunity to rethink and re-evaluate the health care systems' emergency plans, so that an event of this, or similar, scale does not have a devastating impact on healthcare systems in the future, as has happened in Italy during the first months of the health emergency. We hope that the usual organization of nursing will be increasingly characterized by a decrease of the excessive workloads, a reduction of organizational difficulties and finding resources' obstacles, all elements that characterize the nurses' work today.

Strengths and limitations

The experiences and the opinions of the nurses interviewed in this study constitute an important wealth of knowledge for what concerns the current emergency situation in Italy. This knowledge may be useful in the case an event of a similar scale will occur in the future, by encouraging analysis at company organizational level in order to implement strategies and protocols that may permit a different and more effective management of resources, in order to promote an optimal patient care on both medical and nursing sides.

However, study limitations can be given by the fact that the total population of the study was

composed of only 21 respondents: this number, while deepening the study phenomenon in detail, at a local level, could make it difficult to generalize the results. Therefore, it is suggested to implement future research aiming at exploring the phenomenon of caring during health emergency situations.

Conflict of interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

References

1. Dati del Ministero della Salute italiano aggiornati al 30/04/2021 [Italian Ministry of Health, data updated to 30/04/21] available at: http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioContenutiNuovoCoronavirus.jsp?lingua=italiano&id=5338&area=nuovoCoronavirus&menu=vuoto
2. Yang Y, Peng F, Wang R, Yange M, Guan K, Jiang T, Xu G, Sun J, Chang C. The deadly coronaviruses: The 2003 SARS pandemic and the 2020 novel coronavirus epidemic in China. J Autoimmun 2020; 109: 102434.
3. Munro CL, Hope AA. Empowering Nurses in 2020, the Year of the Nurse. Am J Crit Care 2020; 29(3): 165-167.
4. Zohreh K, Zhila F, Mohammad B, Nasrollah A, Ali M, Tahmine S, Mohammad SM, Sobhan M. The Lived Experience of Nurses Caring for Patients with COVID-19 in Iran: A Phenomenological Study. Risk Manag and Healthcare Policy 2021; 12: 1271-1278.
5. Sist L, Cortini C, Bandini A, Bandini S, Massa L, Zain R, Vesca R, Ferraresi A. Il concetto di missed nursing care: una revisione narrativa della letteratura [The concept of missed nursing care: a narrative review of the literature]. Assist Inferm e Ric 2012; 21: 234-239.
6. Artioli G, Foà C, Taffurelli C. An integrated narrative nursing model: towards a new healthcare paradigm. Acta Biomed 2016; 87 (4): 13-22.
7. Ambrosi E, Canzan F, Cavada L, Fedrozzi L, Maini P, Polloni K, Saiani L. Il caring nella pratica: una teoria descrittiva in "Gesti e pensieri di cura" (ed. Mortari L, Saiani L) [Caring in practice: a descriptive theory in "Caring thoughts and gestures"] McGraw – Hill, Milano, 2013.
8. Cozzi D, Nigris D. Gesti di Cura, Elementi di metodologia della ricerca etnografica e di analisi socioantropologica per il nursing [Caring gestures. Elements of ethnographic research methodology and socio-anthropological analysis for nursing], Milano, Colibrì, 1996.
9. Warelow P, Edward KL, Vinek J. Care: what nurses say and what nurses do. Holist Nurs Pract 2008; 22 (3): 146-53.
10. Daniel Callahan D. The WHO Definition of 'Health'. Sud Hasting Cent 1973; 1 (3): 77-87.
11. Leininger M. The phenomenon of caring. Part V. Caring: the essence and central focus of nursing. Nurs Res Rep 1977; 12 (1): 2-14.
12. Vellone E, Sinapi N, Rastelli D. Fenomenologia e metodo fenomenologico: loro utilità per la conoscenza e la pratica infermieristica. Professioni infermieristiche [Nursing Profession] 2000; 53: 237-242.
13. Van Manen M. But Is It Phenomenology? Qual. Health Res. 2017; 27: 775-779.
14. Braun V, Clarke V. Using thematic analysis in psychology. Qualit Research in Psych 2006; 3 (2): 77-101.
15. Fortunato S. Racconti di cura che curano [Tales of care that cure] FNOPI, 2020.
16. Bianchi M, Prandi C. "25 febbraio – 28 marzo 2020 il mio vissuto al tempo del Covid-19": narrazioni di un gruppo di infermieri che lavorano in Canton Ticino ["February 25 - March 28 2020 my life experience at the time of Covid-19": stories of a group of nurses working in the Canton of Ticino]. Professioni Inf 2020; 73: 133-140.
17. Alharbi J, Jackson D, Usher K. The potential for COVID-19 to contribute to compassion fatigue in critical care nurses. J Clin Nurs 2020; 29 (15-16): 2762-2764.
18. Eisenberg L. Disease and illness. Distinctions between professional and popular ideas of sickness. Cult Med Psychiatry 1977; 1 (1): 9-23.
19. Kleinman A. Concepts and a Model for the Comparison of Medical Systems as Cultural Systems. Soc. Sci. Med 1978; 12B, 85-93.
20. Akansel N, Watson R, Vatansever N, Özdemir A. Nurses' perceptions of caring activities in nursing. Nurs Open 2020; 8 (1): 506-516.
21. Lopez V, Chan KS, Wong YC. Nursing care of patients with severe acute respiratory syndrome in the intensive care unit: case reports in Hong Kong. Int J Nurs Stud 2004; 41(3): 263-72.
22. Cao J, Zhang L, Xi H, Lu X, Chu D, Xie M, Li L, Chen J. Providing nursing care to Ebola virus disease patients: China Ebola Treatment Unit experience. J Glob Health 2015; 5 (2): 020301.
23. Michelan V, De Azevedo C, Spiri Wilza C. Perception of nursing workers humanization under intensive therapy. Rev. Bras. Enferm 2018; 71(2): 372-378.
24. Desmond M E, Horn S, Keith K, Kelby S, Ryan L, Smith J. Incorporating Caring Theory into Personal and Professional Nursing Practice to Improve Perception of Care. Int J of Hum Car 2014; 18: 35-44.
25. Garofalo C. La relazione infermiere-paziente. Dal modello disease centred al modello patient centred [The nurse-patient relationship. From the disease centred model to the patient centred model]. Manag in San, 2016; 1: 26-30.
26. Catania G, Zanini M, Hayter M. *et al*. Lessons from Italian front-line nurses' experiences during the COVID-19 pandemic: A qualitative descriptive study. J Nurs Manag 2021; 29 (3): 404-411.
27. Vitale E, Galatola V, Mea R. Observational study on the potential psychological factors that affected Italian nurses

involved in the COVID-19 health emergency. Acta Biomed 2021; 92: 2.
28. Saunders K, Hagist C, McGuire A, Schlereth C. Nursing Without Caring? A Discrete Choice Experiment About Job Characteristics of German Surgical Technologist Trainees, WHU-Otto Beisheim School of Management 2019; 19-2: 1-20.
29. Reper P, Bombart MA, Leonard I, Payen B, Darquennes O, Labrique S. Nursing Activities Score is increased in COVID-19 patients. Intensive Crit Care Nurs 2020; 60: 102891.
30. Lucchini A, Iozzo P, Bambi S. Nursing workload in the COVID-19 era. Intensive Crit Care Nurs 2020; 61: 102929.

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