Original research article

THE DOCTORS' VIEW OF A NURSE'S ROLE DURING THE COVID-19 PANDEMIC: QUALITATIVE RESEARCH

Aleš Chrdle [1, 2, 3] *, Sylva Bártlová [1], Ivana Chloubová [1]

[1] *University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, České Budějovice, Czech Republic*
[2] *Hospital České Budějovice, a. s., České Budějovice, Czech Republic*
[3] *Royal Liverpool University Hospital, Liverpool, United Kingdom*

Abstract

Introduction: The multiple roles of nurses have been transformed during the COVID-19 pandemic. As nurses work alongside doctors, this close cooperation enables them to obtain medium-distance information on the roles of the nurses.

Goal: The study aimed to describe the nurse's role during the COVID-19 pandemic in the Czech Republic.

Methods: In this descriptive qualitative study, we collected data using a semi-structured interview (30 questions). The results were coded (pencil and paper method). Due to the variability of responses, we used a contrast method.

Results: The research included 15 doctors (12 females), with a mean time in medical practice of 13.6 years (2–38 years). The individual interviews lasted 40–70 minutes. Using open coding, we identified 12 main categories that matched and differed. The roles identified across the groups were a mother, a team member, and a hero. Both covid and non-covid hospital units reported extended competencies, while primary care was specific in virtual communication with patients and the role of developing working relationships with patients. Non-covid hospital units appreciated the stability of employment. The roles specific to covid units were facing the public, communicating with family, and creatively scaling up service.

Conclusion: Identifying nurses' leading, often competing roles during the pandemic enables employers, educators, and professional bodies to steer pregraduate and postgraduate education to address these roles better.

Keywords: *COVID-19; Doctor; Nurse; Pandemic; Role*

INTRODUCTION

During the SARS-Cov-2 pandemic, healthcare professionals were exposed to difficult conditions in their work and personal lives that most of them had never experienced before (Komenda et al., 2020). Military terminology was often used, especially in the first years of the pandemic – frontline, triage, enemy, or forming ranks, like previous pandemics (de Jong, 2008). Nurses were closest to the patients with COVID-19 during the pandemic. In healthcare provision, nurses and doctors form a team whose professional perspectives and scope complement each other (Matusov et al., 2022). The interaction and influence between these interdependently connected professions is a natural consequence of working "side by side" (Donovan et al., 2018). At the same time, the perspective of a close professional group on the ways of experiencing and acting in certain situations can bring a better understanding of the dynamics of nurses (an "insider perspective"). Physicians' views of nurses' work and experiences can, in turn, shape the doctor-nurse relationship, and enable the reconfiguration or delegation of work tasks, responsibilities, and competencies,

thus leading to a higher level of satisfaction with work performance under challenging conditions, as well as better work outcomes (Shields et al., 2022; Yu et al., 2020).

This article aims to describe the roles of nurses during the COVID-19 pandemic from the perspective of doctors.

MATERIALS AND METHODS

Design and research tools

This qualitative research was based on open coding to describe possible variables and hypotheses of interest (nurses during the pandemic through the eyes of doctors), which can then be verified within the quantitative research framework. The interviews had a semi-structured format, thus it was possible to open other questions and topics that informants considered necessary. The interviews took place between 1 June 2021 and 31 August 2021.

The content of the semi-structured interviews was based on the objectives set by the research team and defined in the grant project of the AZV ČR, a study of professional literature, and the experience of the multidisciplinary team that participated in the project.

The questions for the semi-structured interview were pilot tested among research team members to check for openness, scope, and comprehensibility before the study began. Medical, nursing, psychological, and sociological professional perspectives and experience were ensured within the research team members.

29 questions covered various areas of the work and life of general nurses: (1) change from the pre-pandemic normal and the burden associated with the work environment, (2) changes in perception, behaviour, and relationship dynamics, (3) stressors in general, (4) communication, (5) knowledge, skills, and attitudes, (6) image and prestige of the nursing profession and (7) outlook for the future – what comes next. Question number 30 allowed doctors to add anything significant that was not discussed during the interview.

The final version of the questions and the method were approved on June 15, 2020, by the ethics committee at the Faculty of Health and Social Sciences of the University of South Bohemia in České Budějovice as part of the research project AZV NU 21-09-00300 (under number 004/2020). The research was conducted under currently valid national ethical standards and regulations (Regulation 2016/679 of the European Parliament and Council of Europe, and the Declaration of Helsinki in its current version from 2013). The interviewed participants were informed about the scope and purpose of the survey and gave informed consent (Suppl. materials).

Research sample

The research subjects were doctors who provided their views and opinions on how nurses managed and experienced situations related to the COVID-19 pandemic in their work and personal lives.

The target group were doctors working in clinical practice in the Czech Republic. Of these, five worked in primary care (P1–P5), five in inpatient wards of Czech hospitals outside of COVID units (NC1–NC5), and five doctors performed a significant part of their work during the pandemic (i.e., the previous 12 months, from summer 2020 to summer 2021) in inpatient wards of Czech hospitals with a predominance of patients hospitalized with COVID-19 (C1–C5). The snowball sampling method was used to obtain informants for the study, where the first contacts recommended other possible informants.

Basic professional and demographic parameters were determined for all informants (age, gender, number of years worked as a doctor and, for doctors from COVID units, the time in months spent caring for patients hospitalized with COVID-19). The highest level of education was not assessed – all informants are doctors by education. During the assessment, we divided the informants into groups according to their type of workplace in the previous year, i.e., COVID unit, inpatient workplace with a predominance of patients without COVID-19, or primary/outpatient workplace (indicated in the answers according to the workplace and the informant's code number as COV 1 to COV 5, Non-COV 1 to Non-COV 5, and P1 to P5).

One interviewer conducted all interviews to maintain the questioning's format, method, and scope. After the informants had been informed of the purpose of the study, its time frame, and given their informed consent to participate in the research, they were remind-

ed that the questions were aimed at the situation of nurses, not the informants-doctors themselves. For each question, it was repeated that the subjects were nurses – in the third person plural. Furthermore, the informants were asked to describe only experiences from their workplace and healthcare facility from nurses with whom they cooperate regularly. They were advised that the research did not aim to capture experiences from other workplaces circulating among the professional public, mediated by storytelling, mass media or social networks. The informants were also asked to compare the described changes with the usual state and regular operation of their workplace and healthcare facility before the COVID-19 pandemic.

Individual interviews lasted 40–70 minutes. An audio recording was made for all interviews, then transcribed verbatim. Individual responses were compared and coded manually by category without using any software (pencil-paper method). Considering the diversity of responses and the different work experiences, the contrasting method was chosen for the final analysis. When contrasting, groups of interviews are evaluated separately using open coding, and similarities and differences between individual codes and categories are compared. The results are supplemented with quotes from some informants (with the informant number) to better illustrate individual categories and codes.

RESULTS

17 physicians were approached, and 15 (3 men and 12 women) agreed to participate in the research. The average age was 39 years (range 27–62 years). The average time practising medicine was 13.6 years (2–38 years). In the group of 5 physicians from COVID units, the informants had spent 5–12 months caring for patients with COVID-19 during the previous 12 months. The locations of medical practice of the physicians were the South Bohemian Region (n = 12), Prague (n = 2), and the Ústí nad Labem Region (n = 1).

Using open coding, we identified 12 main categories and found agreement and disagreement between the groups (Table 1).

The main roles identified included those of mother, team member, and hero. In both COVID and non-COVID inpatient settings, nurses reported a greater range of delegated competencies. In contrast, in primary care, nurses took on responsibility for communicating with patients in a virtual environment and had greater responsibility for setting up

Table 1 – Department comparison – 12 main categories based on free coding of interviews with doctors

COVID inpatient ward	NON-COVID inpatient ward	Primary care
Public relations	X	X
X	X	Change in patient communication (online)
		Relationship with patients
Reflection of the change in the age structure of patients	X	X
Team member	Team member	Team member
Expanding competencies	Expanding competencies	X
X	Increased administrative burden	Increased administrative burden
Communication with patients' families	X	X
Nurse-mother	Nurse-mother	Nurse-mother
Nurse-hero	Nurse-hero	X
Developing creativity	X	X
X	Job security	X

and maintaining working relationships with patients. Nurses in non-COVID hospital settings perceived job security positively.

The role of the mother was prominent across all three groups. Physicians said of nurses: *"Where there was a kindergarten available, they were not allowed to stay home with the children; they took it as a psychological burden even if they would not have stayed home; they felt that the government was throwing them overboard if they wanted something from them"* (non-COV1). Lack of understanding was another factor in the role of the mother: *"Regarding nurses, the teachers did not understand that no one was at home with the children. The creches were useless. They were like a group where they had to sit with masks all day, which was unbearable"* (P3). At the same time, the changing regulations did not allow mothers to fulfil their role in a way that met their satisfaction: *"Everything changed from day to day, the regulations, one day their children could go to school and kindergarten, the next day they had to be at home with them, such uncertainty about what would happen, uncertainty..."* (P5).

Outpatient clinics differ, in that, unlike inpatient departments, there is no change or expansion of competencies. On the other hand, there is an increase in administrative and bureaucratic tasks: *"There was more paperwork around COVID. Sometimes they had to stay after work in the afternoon and finish the paperwork"* (P2). There was also a change in patient communication channels (online): *"... so all communication went online, people learned to write emails, made more phone calls than before"* (P2); *"... it's moving towards some kind of distance contact, whether by email or by phone..."* (P4), and procedures accelerated: *"Procedures accelerated and they had to learn to use the protective gear quickly; they couldn't do that here, they had to learn quickly; they had to get used to working in protective gear for a longer time"* (COV 5).

In the case of outpatient care, we noted the ambivalent role of the hero nurse, while in other workplaces, it was clearly defined: *"People were afraid of healthcare workers – neighbours in the apartment building – especially in the first wave. People avoided them. On the other hand they applauded from the balconies"* (P2); or *"... on one hand they applauded, but on the other hand they pulled away from them, many cannot imagine it. If they do not work there, they do not know what they are talking about"* (COV 1). Resilience and professional loyalty were evident in both COVID and non-COVID units.

According to the doctors, nurses had to endure a more significant workload: *"When the pandemic was at its peak, the workload increased significantly, both in terms of physical work and emotional stress, it increased extremely"* (COV 4). Some non-COVID units also had to cope with a more significant workload due to the division into teams at the beginning and the subsequent transfer of nurses to COVID units: *"We still had work to do with less staff because the nurses had to go to COVID beds; the division into teams didn't work for us, but we still had to work with fewer people"* (Non-COV 2). The team's handling of the adverse situation was commented on positively during reflection within the team: *"When we managed it, the nurses felt that we had dealt with the situation and the disease well, that they were doing it well, that we were good"* (COV 2).

From the doctors' perspective, nurses in the COVID wards acquired a new role, which consisted of increased communication with the public and providing information: *"People demanded a lot of information; they were not our hospitalized patients, but people calling from outside during shifts, all night, all day... the nurses had to handle the calls, there were a lot of people calling from outside; it was difficult... they called asking about testing or vaccination, and the nurses informed them how to get tested, how to get vaccinated, where to get a certificate, where the test results were... it was extra work, but they did it anyway"* (COV 4). This also applied to communication with patients' families. The nurses also had to reflect on the change in the age structure of the patients and the related requirements for adjusting communication with them (thanks to the protective gear, it was more challenging for the staff to understand the older patients): *"Of course, it was made more difficult by the protective gear, when many older patients have, let's say, some hearing loss, etc., so it was probably difficult because of this"* (COV 4). In the category of Nurse as a team member, we noted different negatives

because contact with the allocated students was not mentioned here: *"I was not there; I know that they must have had a lot of work with the medical students who came to help, and the responsibility for them must have been huge because the students had none"* (COV 2). As a result of all the specifics described above, the nurses were forced to take a more creative approach in their work.

Compared to COVID wards, the administrative agenda increased in non-COVID inpatient wards, and the nurses became more stable in their work performance and psychological impacts.

A large part of the work of nurses in COVID units, where they had to use their creativity and ingenuity, was the creation of new working groups and teams in the transformation of regular wards into inpatient COVID units: *"It had to be done on the fly. It was certainly more difficult to train new workers who did not know how or were not used to caring for medical patients"* (COV 1). However, the setting up of teams and the adaptation process was facilitated by the situation's urgency: *"The nurses studied instructions and worked with someone more experienced for a while, and then gradually became independent and, as I said, worked surprisingly well. Of course, some personality characteristics played a role there. It was also difficult for me to train a new person, and perhaps even more so for the nurses, because there are a lot of small tasks"* (COV 3). Trust and support in the teams enabled a more significant use of the nurses' competencies: "*Within a few days, one of them became an expert on a given issue – simply a crash course – the nurses did not have more formal authority, but they quickly gained trust from the team to perform individual tasks, to be independent. There was no room for anyone to handhold them for a long time"* (COV 4).

DISCUSSION

The nursing profession includes a particular system of roles and behaviours assumed by the social status of the nursing profession. The roles of a nurse are socially given and historically conditioned and reflect current events in the society, in both the healthcare system and the nurse's personal life (Farkašová et al., 2006). The traditional perception of the roles of nurses includes the roles of a nurse educator, researcher, care provider, communicator, advocate, change agent, and team player (Al-Hunaishi et al., 2019). During crises (including pandemic waves, natural disasters or wars), it becomes clear how indispensable and irreplaceable nurses are within the healthcare system. It turns out that a crisis reflects new roles, as well as the transformation of existing ones (Caricati et al., 2022).

During the pandemic, nurses can take on new roles and expand the scope of some existing roles, but this may be at the expense of other roles outside the workplace (Urban, 2011), and especially at the expense of self-care (risk of burnout or compassion fatigue) (Choi et al., 2020; Maben and Bridges, 2020).

The interviews with doctors identified the individual roles of nurses in COVID and non-COVID inpatient wards and in primary care, which gained importance during the COVID-19 pandemic due to their scope, novelty or role conflict with other roles (Table 1). The role of the mother was evident in all types of workplaces, especially in role conflict with increased professional demands on nurses. The role of a team member and a hero reflect the workload and perceived as well as real danger, especially during the first months and years of the pandemic – this was an authentic capture of the spirit of the time when the interviews took place. In retrospect, it is necessary to reflect on these perspectives and incorporate them into preparing procedures and measures for future pandemics or similar situations. The leading vital roles mentioned are of the nurse communicator (online communication in primary care, communication with the public and communication with the families of patients in COVID units), and negotiator (relationship with patients, reflection of the change in the age structure of patients). An unpleasant (although unsurprising) finding is the increase in the agenda, i.e., primarily administrative work in non-COVID workplaces and primary care (administrator role). The pandemic had a positive effect on accelerating the development of the nursing profession (expanding competencies in both COVID and non-COVID inpatient units), with nurses taking on the role of creative change-makers and innovators (the need and even necessity of creativity is directly mentioned in COVID

units). Furthermore, the traditional role of nurses as patient advocates has become evident (changing age structure, communication with family). The category of job security, mentioned mainly in non-COVID inpatient wards, complements the content of the extra-professional role of a breadwinner (Deussom et al., 2022).

The interviews revealed doctors' respect for the nurses diverse roles and overall position within the healthcare team in primary care and larger teams in COVID units and non-COVID inpatient settings. These observations are consistent with research studies abroad. The most noticeable were doctors' views on situations where the nurses had to quickly and immediately acquire and use new skills, from using personal protective gear to creating new teams and training a more significant number of new workers (Al-Hunashi et al., 2019). These findings (increasing nurses' competencies and their greater managerial involvement in educating new workers, communication within the team, and training new skills) had already been described during the 2008/2009 influenza pandemic (Bar-Dayan, 2011; Koh et al., 2011). During the COVID-19 pandemic, the interviewed doctors saw the ability of nurses to work within a busy or overloaded healthcare team with greater autonomy regarding nursing care and the education, communication and management of patients, their family members and nursing teams (De Benedictis, 2022).

The time of the interviews in the second summer period of the pandemic impacted the perception of the intensity and dimension of individual questions. At that time, there was a temporary decrease in cases, a partial return to normal work activities, and softening of lockdown restrictions, but in anticipation of another autumn wave (Komenda et al., 2020). Some interviews involved using FFP2 respirators. The responses reflect the pandemic-associated stress experienced in the workplace and personal life (Shivairová et al., 2023).

The doctors' view of nurses indicated the need for cooperation, which some informants explicitly mentioned. Unlike some foreign studies, we did not observe significant friction points in the doctor-nurse relationship (Russell et al., 2022).

The answers can be considered spontaneous; unlike research conducted retrospectively with a more significant time gap from the evaluated events. The higher degree of uncertainty mentioned by most informants coincides with the management of the pandemic in the workplace and personal life described in the literature (Clari et al., 2021; Nelson et al., 2021).

Recording what is currently being experienced is vital for subsequent steps that will enable better functioning of nurse-nurse and doctor-nurse cooperation within the workplace and help in structuring and communicating organizational changes at healthcare facility management level or regional/national level (Ting et al., 2022).

CONCLUSION

This qualitative research identified several roles that nurses assumed during the pandemic. However, there were natural conflicts (roles contradicted) between the individual roles and the resulting competitive expectations. Families expect nurses to continue to function in their role as mothers in terms of raising, educating, and providing for children. The public expects nurses to have the knowledge and skills for their profession and the ability to lead the healthcare team and the public. Doctors expect nurses to be resourceful in providing standard quality care even under difficult conditions.

These are the results of a qualitative study and, therefore, cannot be generalized. However, they indicate the need to further address role conflict in the context of the pandemic among general nurses. Identifying conflicting roles in nurses' lives will allow employers, educational institutions, and nursing professional organizations to adjust work processes, employee support, and undergraduate and postgraduate education, so that nurses can better manage these roles in real life.

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Ethical aspects and conflict of interest
The authors have no conflict of interest to declare.

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SUPPLEMENTARY MATERIALS

Questions and topics for a semi-structured interview

Change from the pre-pandemic normal and the workload associated with the work environment

1) From your perspective, how did the workload of (your) nurses change during the COVID-19 pandemic?
2) How did the nurses' changed/increased physical and psychological burden manifest externally – how did it affect their work? How did it affect their self-perception? Negative and positive.
3) What did nurses lack in their professional lives during the COVID-19 pandemic? What affected their professional performance? What specifically?
4) How did you perceive the effectiveness of nursing care in protective gear (barrier nursing)?
5) If you were part of the reprofiling of beds, how did you manage to create and coordinate the newly formed nursing teams? What helped?
6) How did the nurses train new workers who helped on the ward? Could you describe their induction plan?
7) What measures from the managing healthcare facility, the Ministry of Health of the Czech Republic, and the government have helped nurses – and what measures would you suggest next time?

Changes in perception, changes in behaviour, and relationship dynamics

8) What change have you noticed in the behaviour of patients and their families towards nurses across your department? What was better, what was worse?
9) What change have you noticed in the behaviour of individual members of the multidisciplinary team (doctors, porters, physiotherapists, radiology assistants, cleaners) towards nurses?
10) What change have you noticed in the behaviour of your family/friends in relation to the work of nurses?
11) What change have you noticed in behaviour in the public sphere – media, politicians, social networks?
12) What do you think nurses were missing in their personal and social lives during the COVID-19 pandemic? What affected the performance of their profession? What specifically?

Stressors in general

13) During the COVID-19 pandemic, what stressors affected nurses the most?
14) What positives did the COVID-19 pandemic bring to the nursing profession in general and to the lives of individual nurses?
15) What benefits helped nurses?
16) How did nurses perceive the extraordinary rewards and publicity around them?

Communication

17) How did nurses manage communication in public – how were they heard, how were they represented in the media, and how were they talked about?
18) How did nurses manage communication within the team as part of direct patient care?
19) How did communication with the patient and their family take place?

Knowledge, skills, and attitudes

20) How have relationships at your workplace changed among individual professions in relation to the nurses – transfer of responsibilities, delegation, adjustment of competencies?

21) What knowledge and skills (including soft skills, etc.) did nurses lack when treating patients who tested positive for COVID-19?
22) What competencies and activities could nurses acquire based on this experience in the future?
23) How did nurses manage to accompany their patients in the event of death?
24) How did nurses manage the coping with professional stress?

Image and prestige of the nursing profession

25) How have nurses' attitudes towards themselves, life, family, patients, colleagues, and politics changed after their experience working on the frontline?
26) How did the COVID-19 pandemic impact the social status and prestige of the nursing profession? How do nurses now perceive their position/profession in society? How among family members and how in public?

Outlook for the future – what's next?

27) How prepared are the nurses to care for infectious patients in the successive waves?
28) What would help them EXTERNALLY if a similar situation occurred again?
29) Are there any planned teambuilding/supervision/coaching events for nurses in your area? Why yes, why not?

General question

30) Do you have anything to add?

* **Corresponding author:** Aleš Chrdle, Hospital České Budějovice, a. s., , Boženy Němcové 54, 370 01 České Budějovice, Czech Republic; e-mail: chrdle@email.cz
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