

ORIGINAL ARTICLE

MEANING OF HOSPITALIZATION DUE TO COVID-19: A Methodological Approach in Grounded Theory

Camila Harmuch¹, Jessica dos Santos Pini², Paula Antunes Bezerra Nacamura³,
Anny Caroline Ribeiro Devechi⁴, Juliana Graciela Vestena Zillmer⁵,
Maria Aparecida Salci⁶, Marcelle Paiano⁷

Highlights:

- (1) Hospitalization due to COVID-19 carried both positive and negative meanings for patients.
- (2) The support provided by healthcare professionals was essential in fostering positive feelings during recovery.
- (3) Fear of hospital discharge was present due to uncertainty about potential readmission.

ABSTRACT

This study aimed to understand the meanings attributed to hospitalization by individuals who experienced moderate and severe forms of Covid-19. It is a qualitative study conducted with 19 individuals who had moderate and severe cases of Covid-19 in a municipality in the northwest region of the state of Paraná, from April to November 2021. The study was based on the theoretical framework of Symbolic Interactionism and employed the Constructivist Grounded Theory as its methodological approach. Data collection was carried out through individual interviews mediated by technology. The analysis followed open and focused coding, as proposed by the analytical method. The results indicate that both positive and negative meanings were constructed during hospitalization due to Covid-19. The influence of healthcare professionals was essential in fostering positive feelings toward the hospital environment, the disease, and the hospitalization units, as well as reinforcing the individual's role as an active agent in their recovery. Negative feelings such as fear and despair were also observed, both regarding the severity of the disease and the care received, due to healthcare professionals' lack of experience in handling Covid-19. Given the high number of hospitalizations, fear of hospital discharge was also significant, as patients were concerned about potential deterioration in their condition that might require readmission. The participants' experiences during the pandemic can serve as a foundation for understanding and formulating healthcare policies in public health emergencies.

Keywords: Covid-19; hospitalization; emotions; life-changing events; nursing; qualitative research.

¹ Universidade Estadual de Maringá – UEM. Programa de Pós-Graduação *Stricto Sensu* em Enfermagem. Maringá/PR, Brazil. <https://orcid.org/0000-0002-1609-1037>

² Universidade Estadual de Maringá – UEM. Programa de Pós-Graduação *Stricto Sensu* em Enfermagem. Maringá/PR, Brazil. <https://orcid.org/0000-0003-3077-4093>

³ Universidade Estadual de Maringá – UEM. Programa de Pós-Graduação *Stricto Sensu* em Enfermagem. Maringá/PR, Brazil. <https://orcid.org/0000-0002-7106-7478>

⁴ Universidade Estadual de Maringá – UEM. Programa de Pós-Graduação *Stricto Sensu* em Enfermagem. Maringá/PR, Brazil. <https://orcid.org/0000-0001-8614-8708>

⁵ Universidade Federal de Pelotas – UFPel. Programa de Pós-Graduação *Stricto Sensu* em Enfermagem. Pelotas/RS, Brazil. <https://orcid.org/0000-0002-6639-8918>

⁶ Universidade Estadual de Maringá – UEM. Programa de Pós-Graduação *Stricto Sensu* em Enfermagem. Maringá/PR, Brazil. <https://orcid.org/0000-0002-6386-1962>

⁷ Universidade Estadual de Maringá – UEM. Programa de Pós-Graduação *Stricto Sensu* em Enfermagem. Maringá/PR, Brazil. <https://orcid.org/0000-0002-7597-784X>

INTRODUCTION

The knowledge of pandemics that have devastated humanity throughout history, with a high toll on human lives, prompts us to reflect on the value of decisions related to human survival, existing health strategies, and current national health policies and systems.¹

Among the most defining characteristics throughout history, pandemics have stood out as health crises marked by rapid global spread, accelerated contagion, and the loss of millions of human lives across all age groups, in addition to the significant burden of socioeconomic hardships and associated health and psychological problems.²

The coronavirus disease 2019 (Covid-19) pandemic resulted in a high number of hospitalizations, with approximately 64.4% of the Brazilian population requiring hospitalization due to respiratory failure, and 36.7% of these patients admitted to Intensive Care Units (ICUs) due to the high virulence of the disease.³ The classification of the disease as mild, moderate, severe, and critical by the World Health Organization (WHO) highlights its potential for worsening and the need for hospital treatment, including intensive care resources.⁴

Globally, the pandemic represented an unprecedented social and health crisis.⁴ This situation led countries such as Canada, the United Kingdom, and Sweden to face healthcare system saturation, requiring them to triple the availability of hospital beds, particularly ICU beds, despite limited resources.⁵

Amid this chaotic scenario, hospital clinical staff experienced high levels of stress, and healthcare facilities were overcrowded due to the unknown nature of the disease, the lack of well-defined protocols, and the shortage of trained professionals, all of which contributed to worsening the experience of Covid-19 hospitalization.⁶

In this context, when individuals undergo hospitalization for an acute illness, various meanings may emerge from the experience.⁷ Understanding these meanings enables healthcare professionals and services to intervene appropriately, helping to ensure that hospitalizations for acute and severe illnesses, or even future pandemic situations, are better experienced and less iatrogenic for those involved.

Thus, recognizing the importance of generating scientific knowledge that underpins healthcare practices, including in future scenarios, we sought to understand the meanings attributed to hospitalization by individuals who experienced moderate and severe forms of Covid-19.

METHOD

This is a qualitative study that adopted Symbolic Interactionism (SI) as its theoretical framework to facilitate the understanding of social life based on meanings derived from an interactive process with lived experiences.⁸ As a methodological framework, the study employed the Constructivist Grounded Theory (CGT) approach, which considers the meanings attributed to phenomena and values the relationship between the knowing subject and the investigated object.⁹

This research is linked to the Covid-19 Paraná Cohort Study, developed as part of the research project “Longitudinal Follow-up of Adults and Older Adults Discharged from Hospitalization for COVID-19.”¹⁰

The study was conducted in a municipality located in the northwest macro-region of Paraná, home to the 15th Regional Health Office and the Intermunicipal Health Consortium of the Association of Municipalities of Setentrão Paranaense (Cisamusep in Portuguese). As of December 31, 2020, the 15th Regional Health Office had recorded 34,797 confirmed cases of covid-19, with 26,502 recovered

patients and 537 deaths. The number of hospitalizations among adults and older adults in 2020 totaled 1,830.¹¹

Following the theoretical sampling principle proposed by CGT, the first informants were intentionally selected from the Covid-19 Paraná/UEM Cohort Study database.¹⁰ The initial criteria for constructing the first sample group included individuals residing in the study municipality, aged 18 years or older, who had been notified and hospitalized in general wards between March 1, 2020, and December 31, 2020, with a final classification of Covid-19 positive, recovered, and with valid phone numbers (8 or 9 digits). Pregnant and postpartum women, as well as individuals who, after telephone contact, were unable to respond, were excluded.

Thus, the first sample group consisted of seven individuals hospitalized in general wards from March to June 2020. After forming the first sample group, it became evident that the hospitalization periods were closely linked to the following themes: fear of hospital bed shortages, fear of reinfection, and fear of health deterioration. Based on these findings, a second sample group was created, considering different months of the year.

Therefore, data collection continued with participants who had been hospitalized in general wards but during different months than those in the first group, aiming for a more comprehensive understanding of the phenomenon under study. The second sample group consisted of six individuals hospitalized in general wards from September to December 2020, following the same inclusion criteria as the first group.

Through the accounts of the second sample group, it was possible to supplement information regarding the hospitalization period, as it coincided with the pandemic peaks in the municipality. However, it was still necessary to understand the experiences of individuals in different hospitalization settings. For this reason, the formation of a third and final sample group was considered, with the following inclusion criteria: individuals classified as having moderate or severe Covid-19, with valid phone numbers, who had been hospitalized in the ICU at any time in 2020, and who had been discharged from the hospital.

Data collection was conducted through individual interviews mediated by technology between April and November 2021, led by the principal researcher. The interviews took place in a virtual environment via WhatsApp® calls and telephone calls due to the distancing measures required during the pandemic.

The interviews followed a script developed by the researcher, which included a sociodemographic questionnaire and a guiding question: "Tell me your story from the moment you were diagnosed with Covid-19 until today." Additionally, supporting questions were used, such as: What did hospitalization mean to you? What did hospital discharge mean to you? What changes occurred in your life after the diagnosis and hospitalization? How did you cope with these changes? How has life been for you after discharge? How is your relationship with other people?

The accounts were recorded using an electronic device and fully transcribed into a Microsoft Word document, with adjustments made to eliminate linguistic redundancies without altering the content or meaning. The average duration of the interviews was 40 minutes.

Data analysis was carried out in two main stages. The first stage involved open coding, with line-by-line and incident-by-incident analysis of each interview segment, followed by focused coding, in which the most relevant initial codes were used to classify, integrate, synthesize, and organize the data into categories and subcategories.¹²

During both the initial (line-by-line) and focused coding stages, each segment of the original coding was categorized and assigned codes that expressed the meanings conveyed in the participants' statements. A total of 1,421 codes emerged from this analytical process. The most significant codes

were then classified, integrated, and organized into categories and subcategories until they reached the central phenomenon of the study, presented below. This process was carried out using MAXQDA Plus 2022 Student, version 22.0.1. The theoretical model was tested with three participants—one from each sample group—through a video call.

The study was conducted and approved in accordance with the guidelines established by Resolutions No. 466/12 and 510/16 of the National Health Council concerning research involving human subjects (CAAE: 34787020.0.3001.5225). During the telephone interviews, the interviewer read the Informed Consent Form in full and asked participants to verbally confirm their agreement to participate in the study. Participants were also asked to provide an email address or a messaging app contact to receive the signed consent form from the researchers.

To maintain participants' anonymity, they were identified as "WARD 1; WARD 2....ICU 1; ICU 2....," corresponding to their hospitalization unit, followed by Arabic numerals in the order in which the interviews were conducted.

RESULTS

Of the 19 interviewees, 12 (63%) were women, with ages ranging from 24 to 66 years. Among them, 11 (57%) had completed high school, while 8 (42%) had higher education. The predominant type of employment was self-employment. The length of hospitalization in the general ward ranged from four to 30 days, with patients admitted beginning in March 2020. Regarding ICU hospitalization, the length of stay varied from 10 to 57 days, with admissions occurring in June 2020 and between September and December 2020.

The analyzed data led to the identification of two thematic categories: "Experiencing hospitalization: positive aspects of the experience" and "Identifying vulnerabilities during hospitalization."

The construction of meanings regarding hospitalization due to COVID-19 arises from individuals' interactions with their surroundings, as they create and modify these meanings through their engagement with the environment, other people, and themselves, often adapting them to better align with their lived reality.

Thus, this study was divided into two thematic categories: "Experiencing hospitalization: positive aspects of the experience," developed from the focused codes perceiving the reality of hospitalization and recognizing the positive aspects of hospitalization, and "Identifying vulnerabilities during hospitalization," developed from the codes recognizing the vulnerabilities of the healthcare system and identifying negative feelings.

Experiencing hospitalization: positive aspects of the experience

Various experiences shaped the construction of meanings regarding the hospitalization of Covid-19 patients, primarily related to the care provided by healthcare professionals and the services of the Unified Health System (SUS in Portuguese), which were perceived as essential for maintaining the quality of care during hospitalization.

"I see that every human being, every professional there, is giving their all so that the patient can recover because every needle, every ampoule, every pill administered to the patient is for their health [...]." (Ward 4)

"[...] I owe a great deal of gratitude to the team that took care of me, [...] I am grateful to SUS, which took care of me. If it weren't for SUS, I would not have had access to adequate treatment because our financial situation does not allow for that, and I know that private hospitalization is expensive [...]." (Ward 11)

The meanings constructed through interaction recognize both the general ward and the ICU as spaces of care and support, where being hospitalized means being welcomed, cared for, and feeling safe. This sense of security is made possible by the awareness patients develop of the healthcare setting and the care provided through their interactions with healthcare professionals.

[...] I felt calm, calm at all times, from admission to my stay in the ICU (ICU 16).

[...] the doctor insisted on admitting me and reassuring me, telling me that they would take care of me, that everything would be fine, and that I would soon go home to see my child. So, I felt very welcomed (Ward 3).

[...] the trust I placed in the professionals who cared for me, the kindness they showed—it was very important to me (Ward 12).

[...] I have a phobia and am extremely anxious, but I told myself that I had to stay strong and follow all their instructions because I didn't know how many days I would have to stay there (Ward 3).

The participants recognized themselves as active agents in their recovery from Covid-19, considering this moment essential for self-awareness and the restructuring of their perceptions of life. There was a process of awareness – an act of thinking and reflection – that can be understood as an internal dialogue emerging from each individual's experience and social interactions, ultimately transforming into a collective understanding.

[...] That's when I realized I could help, that it wasn't a disease where I should just sit and wait for the medication to work – I had my role to play. That was very important to me. That was when I started to fight against Covid-19 (Ward 13).

[...] It was a moment of reflection, a moment of purification because you purify yourself, you understand? You suffer, but from that moment on, you become a better person (Ward 10).

[...] I promised myself that at that moment, what mattered most was getting better and being able to go back home (ICU 18).

Consequently, their perception of hospital wards changed, as being part of this environment altered pre-existing meanings, helping them realize how necessary and essential hospitalization was for their recovery.

[...] Today, I see that the ICU is not a step toward death. A person in the ICU is in a place where their health is best safeguarded. Now I understand that [...] (ICU 19).

I had to be hospitalized. I left home unable to breathe; my lungs were 90% nonfunctional. If I had stayed home, I would have died. It was necessary and good that I was admitted (ICU 15).

[...] I think that if I hadn't been hospitalized, I wouldn't be here doing this interview with you. So, it was very significant for me, for my recovery, for my self-esteem, for my confidence [...] it was very important to me [...] (Ward 12).

Many positive meanings were attributed to hospitalization due to Covid-19, including the care provided by professionals across different hospital sectors and the feelings of security, well-being, and tranquility. This resulted in a new perspective regarding healthcare professionals, treatments, the hospital environment, and oneself.

Identifying vulnerabilities during hospitalization

Despite the positive meanings attributed to hospitalization, at some point during their stay, the study participants expressed feelings of vulnerability and despair regarding the treatment they received. They felt exposed, as they perceived the uncertainty of healthcare professionals when performing and prescribing treatments due to their limited knowledge of the disease. This situation reaffirmed the crucial role of science and information in confronting COVID-19.

[...] You ask, and they say, “We don’t know, it’s new.” So, we get the impression that they are using trial and error, that there’s no study, no protocol, nothing. So, am I going to be the mistake or the success? (Ward 9).

[...] When you talk to a doctor and see in their face that they’re not sure about what they’re doing, that’s when despair sets in (Ward 5).

[...] We know that the path to fighting disease is through research. If we don’t encourage studies, we won’t move forward. I didn’t know anyone who had been in the condition I was in—I was the first person to leave the ICU alive after 30 days of hospitalization (ICU 19).

Some procedures performed by healthcare professionals, such as handling oxygen and difficulties in executing certain medical tasks, heightened patients’ concerns at various moments during hospitalization.

[...] It’s a very serious situation when nursing technicians don’t know how to connect an oxygen tank. How many people went through what I did due to human error? It was human error (ICU 16).

“Overall, they were all very good to me. I don’t believe that those who made mistakes did so out of malice – perhaps they made errors simply because they didn’t know (ICU 19).

During their hospital stay, interviewees reported that feelings of fear, pain, and despair prevailed due to uncertainty about the future and their own recovery, including concerns about death and the severity of the disease.

It brings thoughts of intense pain, chaos, despair, and death – people fighting to survive and others struggling to keep them alive (Ward 4).

[...] The chances of us staying alive are very slim (Ward 6).

[...] You immediately think of the worst. Okay, it’s an ICU, and you receive more assistance, but it’s terrifying. I left the ICU, but the ICU didn’t leave me—I remember every day that I was there (ICU 18).

The fear of intubation was also present due to concerns about the potential long-term consequences of this procedure. However, due to the pain and suffering caused by the inability to breathe, some participants wished for it.

[...] I was afraid of needing to be intubated, but at some point, I thought that if I were intubated, maybe it would be better because I wouldn’t have to struggle so much to breathe (ICU 15).

[...] Things kept getting worse, and there came a moment when I thought I wouldn’t be able to endure it, that I would have to be intubated, but thank God, I didn’t need it (Ward 13).

[...] I kept thinking, I’m a teacher, I give lectures, I need my voice. If I get intubated, how will my voice recover when I return to work? (ICU 18).

Hospital discharge was an eagerly awaited moment for some, but for others, it became synonymous with fear and distress. These meanings were related to the feeling of being left without medical assistance, the fear of reinfection, the lack of available hospital beds, and the body’s weakened state due to complications caused by Covid-19.

It was a joy, an immense joy [...], my neighbors were waiting for me with balloons because I arrived by ambulance. It was an immense joy to know that I had won, that I was going home (Ward 12).

[...] I was afraid to go home, afraid that something would happen and I would have to return to the hospital. And at that time, there were no more beds available. I kept thinking, my God, what if I need to go back to the hospital and there are no beds left? I was very afraid of getting infected again (Ward 1).

Discharge, for me, was completely unsettling. I came home scared because I didn’t know what would happen. I still had chest pain, I still had symptoms, and another thing that many people talked about – thrombosis. I couldn’t stop thinking about it.” (Ward 6).

The meanings constructed during hospitalization were tied to self-perceptions of vulnerability and insecurity regarding the care received from healthcare professionals. These feelings resulted in apprehension during hospitalization, shaped by interactions with the environment in which they were placed and the people surrounding them.

DISCUSSION

During hospitalization, positive aspects were identified, such as feelings of calmness, support, and trust experienced by patients through their interactions with healthcare professionals, which helped minimize the suffering associated with hospitalization.

A phenomenological study conducted with patients hospitalized due to Covid-19 in Barcelona, Spain, highlighted positive feelings related to the care provided by professionals at the time of admission, such as generosity, tranquility, and comfort. However, trust and adaptation to the situation were crucial for experiencing this moment.¹³ Similarly, in China, hospitalized participants reported feelings of love, camaraderie, and kindness during hospitalization, while negative emotions were attributed exclusively to the virus.¹⁴

In Australia, a phenomenological study with Covid-19 patients found that they had complete trust in healthcare professionals, receiving extensive information about their disease, treatment, and prognosis.¹⁵ This sentiment contrasts with the present study, in which participants experienced moments of insecurity due to healthcare professionals' lack of knowledge about the disease and possible treatment approaches.

In this regard, it is evident that patient care is closely linked to the knowledge, confidence, and self-assurance conveyed by healthcare professionals.¹⁶ However, the shortage of human and material resources, along with the stress and anxiety caused by the pandemic, may have influenced the quality of care provided.¹³

During the pandemic, many healthcare professionals were recruited to work in Covid-19 units, particularly in ICUs, and a significant number did not receive adequate training to treat critically ill patients. In addition to increasing the risk of medical errors, this situation further deteriorated the physical and mental health of workers, leading to absences in nearly 40% of all healthcare professional categories, regardless of their field or years of experience.¹⁷

A Danish study conducted with nurses working in Covid-19 wards highlighted the multiple challenges these professionals faced, such as being reassigned to different departments, working in an unfamiliar and unsafe environment, and lacking knowledge about the disease. These factors contributed to healthcare workers experiencing fear while providing care, as they felt unqualified to treat Covid-19 patients.¹⁸

Beyond the role of healthcare professionals, the study participants emphasized their own active involvement as essential for maintaining their health and fighting the disease during hospitalization. Research has shown that self-care and supported care are crucial practices for maintaining and improving health, as they promote well-being and help individuals cope with various situations.¹⁹

Another major highlight during the Covid-19 pandemic in Brazil was the SUS, the country's universal healthcare system, which was frequently featured in news reports—showcasing lives that were saved but also lives that were lost, often due to a lack of medical supplies, healthcare professionals, and hospital capacity to meet patient demand.²⁰ Furthermore, the importance of science was frequently mentioned in aiding the understanding of factors associated with infection and guiding government responses to combat the pandemic.²¹

In this regard, it is important to note that in Brazil, low investment and funding cuts to research²³ agencies, universities, and public institutes had a direct impact during this period. These cuts were reflected in the slower response to combat the effects of the pandemic and the lack of investment in disease treatment.²²

Given this scenario, patients hospitalized with Covid-19 required not only healthcare professionals' expertise but also adequate healthcare infrastructure and the availability of essential supplies for treatment. Consequently, all these challenges made hospitalization a turbulent period for many patients, generating emotions that may have impacted their physical, social, and psychological well-being.²⁴

From this perspective, fear was also present at the time of hospital discharge. According to the interviewees, they expressed concerns about needing to be rehospitalized and the possibility of not securing a hospital bed.²⁵ In the United States, a study showed that among 106,543 survivors, approximately 9,504 were readmitted to the same hospital within two months after discharge, up until August 2020. The likelihood of readmission increased among individuals aged ≥ 65 years, those with one or more chronic conditions, and those who had been hospitalized within the three months prior to their initial Covid-19 admission.²⁶

As a result of the hospitalization experience and the situation the participants endured, meanings were constructed and shaped. According to SI, meanings are established through social interactions, engagement with the environment, and self-reflection in an interpretative process.²⁷ Thus, dealing with negative emotions caused by hospitalization due to a highly infectious new virus had detrimental effects on patients' coping abilities and self-esteem.¹⁵

By deepening the understanding of the meanings attributed to hospitalization, it is hoped that this study will contribute to the improvement of actions that minimize negative feelings and promote humanized care in hospital settings.

The study had some limitations, such as the geographical restriction of the research site, which made it impossible to capture the perceptions of individuals from different locations. Additionally, interviews were not conducted immediately after hospital discharge, which may have influenced the perceptions formed during hospitalization.

FINAL CONSIDERATIONS

This study reflects the human capacity to adapt to adverse events through the influence of physical, human, and personal resources to overcome challenging situations.

Both positive and negative meanings were constructed during hospitalization due to Covid-19. The role of healthcare professionals was essential in fostering positive feelings regarding the hospital environment, the disease, the hospitalization units, and the patient's recognition of themselves as an essential agent in their own recovery.

However, the development of negative emotions, such as fear and despair, was also observed. These emotions were linked to the severity of the disease, a lack of confidence in healthcare professionals, and the fear of hospital discharge due to the possibility of readmission, particularly given the scarcity of hospital beds.

Finally, it is believed that the emotions expressed by participants during the pandemic, as demonstrated in this study, can serve as a basis for improving healthcare assistance in public health emergencies—not only in future pandemics but also in other situations where hospitalization in intensive care settings is necessary.

REFERENCES

- ¹ Gullot CC, Ramos SG. Principales pandemias en la historia de la humanidad. *Rev Cubana Pediatr* [Internet]. 2020 [cited 2022 July 17];92(1):e1183. Available from: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0034-75312020000500008&lng=es
- ² Fundação Oswaldo Cruz. Centro de Relações Internacionais em Saúde (CRIS). Informe sobre saúde global e diplomacia da saúde, nº 4/2022. Rio de Janeiro, Brasil. 2022. Available from: <https://portal.fiocruz.br/documento/cadernos-cris-fiocruz-informe-04-2022>
- ³ Ceccon RF, Júnior CASG, Perondi F, Oliveira Marx L, Silva LAP, Cordeiro MEC, et al. Hospitalizations for COVID-19 in Brazil: sociodemographic characteristics, risk factors and clinical manifestations. *Saúde Redes* [Internet]. 2023;9(2):3800. DOI: <https://doi.org/10.18310/2446-4813.2023v9n2.3800>
- ⁴ World Health Organization. Coronavirus disease (COVID-19) Weekly Epidemiological Update and Weekly Operational Update, 2020.
- ⁵ Remuzzi A, Remuzzi G. COVID-19 and Italy: What next? *Lancet* [Internet]. 2020 [cited 2022 June 19];395:1225-28. DOI: [https://doi.org/10.1016/S0140-6736\(20\)30627-9](https://doi.org/10.1016/S0140-6736(20)30627-9)
- ⁶ González-Gil MT, González-Blázquez C, Parro-Moreno AI, Pedraz-Marcos A, More APSS, Otero-García L, et al. Nurses' perceptions and demands regarding COVID-19 care delivery in critical care units and hospital emergency services. *Intensive Crit Care Nurs* [Internet]. 2021 [cited 2022 Mar. 11];62(102966). DOI: <https://doi.org/10.1016/j.iccn.2020.102966>
- ⁷ Fazio P, Cerminara G, Ruberto S, Caroleo M, Puca M, Rania O, et al. Hospitalization and other risk factors for depressive and anxious symptoms in oncological and non-oncological patients. *Psycho-Oncology* [Internet] 2017 [cited 2021 June 22];26(4):493-499. DOI: <https://doi.org/10.1002/pon.4170>
- ⁸ Blumer, H. *Symbolic Interactionism: Perspective and Method*. Berkeley: University of California Press; 1969.
- ⁹ Clark AE, Friesen CE, Washburn RR. *Situational analysis: grounded theory after the interpretative turn*. Thousand Oaks, CA: Sage; 2017.
- ¹⁰ Salci MA, Carreira L, Facchini LA, Oliveira MLF, Oliveira RR, Ichisato SMT, et al. Post-acute COVID and long-COVID among adults and older adults in the State of Paraná, Brazil: protocol for an ambispective cohort study. *BMJ open* [Internet] 2022 [cited 2023 June 11];12(9):e061094. DOI: <https://doi.org/10.1136/bmjopen-2022-061094>
- ¹¹ Paraná. Secretária da Saúde. Diretoria de Vigilância em Saúde. [Internet] 2020 Informe Epidemiológico. [cited 2022 Jan. 20] 2020. Available from: <https://www.saude.pr.gov.br/Pagina/Coronavirus-COVID-19>
- ¹² Charmaz K. *A construção da teoria fundamentada: guia prático para análise qualitativa*. Editora Penso; 2009.
- ¹³ Venturas M, Prats J, Querol E, Zabalegui A, Fabrellas N, Rivera P, et al. Lived Experiences of Hospitalized COVID-19 Patients: A Qualitative Study. *Int J Environ Res Public Health*, [Internet] 2021 [cited 2022 Jan. 22];18(20):10958. DOI: <https://doi.org/10.3390/ijerph182010958>
- ¹⁴ Hao F, Tam W, Hu X, Tan W, Jiang L, Jiang X, et al. A quantitative and qualitative study on the neuropsychiatric sequelae of acutely ill COVID-19 inpatients in isolation facilities. *Transl Psychiatry* [Internet] 2020 [cited 2022 Mar. 19];10(355). Available from: <https://doi.org/10.1038/s41398-020-01039-2>
- ¹⁵ Shaban RZ, Nahidi S, Castillo CS, Li C, Gilroy N, O'Sullivan MVN, et al. SARS-CoV-2 infection and COVID-19: The lived experience and perceptions of patients in isolation and care in an Australian healthcare setting. *Am J Infect Control* [Internet] 2020 [cited 2022 June 22];48(12):1445-50. DOI: <http://dx.doi.org/10.1016/j.ajic.2020.08.032>
- ¹⁶ Lee J, Kang SJ. Factors influencing nurses' intention to care for patients with emerging infectious diseases: application of the theory of planned behavior. *Nurs. Health Sci* [Internet] 2020 [cited 2022 Jan. 11];22(1):82-90, 2020. DOI: <https://doi.org/10.1111/nhs.12652>
- ¹⁷ Raurell-Torredà M, Martínez-Estalella G, Frade-Mera MJ, Rodríguez-Rey LFC, Pio ERS. Reflexiones derivadas de la pandemia COVID-19. *Enferm. intensiva* [Internet] 2020 [cited 2022 June 19];31(2):90-93. DOI: <https://doi.org/10.1016/j.enfi.2020.03.002>
- ¹⁸ Specht K, Primdahl J, Jensen HI, Elkjaer M, Hoffmann E, Boye LK, et al. Frontline nurses' experiences of working in a COVID-19 ward-A qualitative study. *Nurs Open* [Internet] 2021 [cited 2022 Apr. 20];8(6):3006-3015. DOI: <https://doi.org/10.1002/nop2.1013>
- ¹⁹ Mohammad H, Elham M, Mehraeen E, Aghamohammadi V, Seyedalinalaghi S, Kalantari S. et al. Identifying data elements and key features of a mobile-based self-care application for patients with COVID-19 in Iran. *Health Informatics J* [Internet] 2021 [cited 2022 Mar. 14];27(4). DOI: <https://doi.org/10.1177/14604582211065703>
- ²⁰ Costa AM, Rizzotto MLF, Lobato LVC. In the COVID-19 pandemic, Brazil sees the SUS. *Saúde debate* [Internet] 2020 [cited 2022 Mar. 23];44(125):289-296. DOI: <https://doi.org/10.1590/0103-1104202012500>
- ²¹ Lipsitch M, Swerdlow DL, Finelli L. Defining the epidemiology of COVID-19 – studies needed. *N Engl J Med* [Internet] 2020 [cited 2022 June 12];382(13):1194-95. DOI: <http://dx.doi.org/10.1056/NEJMp2002125>

- ²² Carvalho R, Carvalho R, Zagni RM. Em guerra e sem armas: a pandemia mundial e o desmonte das ciências no Brasil. *Confluências* [Internet] 2020 [cited 2023 July 20];22(2):107-130 Available from: <https://periodicos.uff.br/confluencias/article/view/43046>
- ²³ Rodrigues CR, Pereira F, Rocha S, Pinto M, Freitas M. As vivências do paciente hospitalizado durante a pandemia covid-19: revisão integrativa. *RIIS* [Internet] 2021 [cited 2023 Mar. 22];4(1):87-97. DOI: <https://doi.org/10.37914/riis.v4i1.132>
- ²⁴ Timmermann C, Uhrenfeldt L, Birkelund, R. Room for caring: patients' experiences of well-being, relief and hope during serious illness, *Scand J Caring Sci* [Internet] 2015 [cited 2022 Jan. 12];29(3):426-34, 2015. DOI: <https://doi.org/10.1111/scs.12145>
- ²⁵ Lima CKT, Carvalho PMM, Lima IAAS, Nunes JVAO, Saraiva JS, Souza RI, et al. The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease). *Psychiatry Research* [Internet] 2020 [cited 2022 June 15];287. DOI: <https://doi.org/10.1016/j.psychres.2020.112915>
- ²⁶ Lavery AM. Characteristics of Hospitalized COVID-19 Patients Discharged and Experiencing Same-Hospital Readmission – United States. *MMWR Morb Mortal Wkly Rep* [Internet] 2020 [cited 2022 June 16];69(45):1695-1699. DOI: <https://doi.org/10.15585/mmwr.mm6945e2>
- ²⁷ Sandstrom KL, Martin DD, Fine, G. A. Símbolos, selves e realidade social: uma abordagem interacionista simbólica à psicologia social e à sociologia. *Coleção Sociologia*. Petrópolis: Editora Vozes, 2016. p. 384.

Submitted: July 25, 2023

Accepted: July 17, 2024

Published: March 13, 2025

Author Contributions

Camila Harmuch: Conceptualization; Data curation; Formal analysis; Investigation Methodology; Resources; Validation; Writing – original draft.

Jessica dos Santos Pini: Investigation; Resources; Visualization; Data curation.

Paula Antunes Bezerra Nacamura: Investigation; Resources; Visualization; Data curation.

Anny Caroline Ribeiro Devechi: Investigation; Resources; Visualization; Data curation.

Juliana Graciela Vestena Zillmer: Formal analysis; Writing – original draft; Writing – review & editing.

Maria Aparecida Salci: Formal analysis; Writing – original draft; Writing – review & editing.

Marcelle Paiano: Project administration; Methodology; Supervision; Validation; Writing – original draft; Writing – review & editing.

All authors approved the final version of the text.

Conflict of interest: There is no conflict of interest.

Funding: The research is linked to the Covid-19 Cohort Paraná/Universidade Estadual de Maringá (UEM) study, developed under the research project “Longitudinal Follow-up of adults and elderly patients discharged from hospitalization due to Covid-19.” Financed by the Ministry of Science, Technology, and Innovations/National Council for Scientific and Technological Development/National Fund for Scientific and Technological Development/Ministry of Health/Secretariat for Science, Technology, Innovation, and Strategic Inputs/Department of Science and Technology N. 07/2020- Research for tackling Covid-19, its consequences, and other respiratory syndromes.

Corresponding Author

Camila Harmuch

State University of Maringá – UEM

Graduate Program in Nursing (*Stricto Sensu*)

Av. Colombo, 5790 – Zona 7, Maringá/PR, Brazil. ZIP Code 87020-900

camila.harmuch@gmail.com

Editor-in-Chief: Adriane Cristina Bernat Kolankiewicz. PhD

This is an open access article distributed under
the terms of the Creative Commons license.

