

Nurses in the front line of the combat to Covid-19 in the hospital environment: related experience

Rebecca Maria Oliveira de Góis

PhD student, Graduate Program in Nursing and Health,
Federal University of Bahia, Brazil
ORCID: <https://orcid.org/0000-0002-3935-5904>
E-mail: rebecca.gois@hotmail.com

Ises Adriana Reis dos Santos

PhD student, Graduate Program in Nursing and Health,
Federal University of Bahia, Brazil
ORCID: 0000-0002-5858-5537.
E-mail: isesars@ufba.br

Fernanda Costa Martins Gallotti (Corresponding author)

PhD, Health Sciences Graduate Program, Federal University of Sergipe. Professor of Nursing at the Tiradentes University, Aracaju, Brazil.
ORCID: <https://orcid.org/0000-0002-9063-1273>
Email: fernanda.gallotti@souunit.com

Ingredy Nayara Chiacchio Silva

Master's student of the Post-Graduate Program in Nursing and Health at the Federal University of Bahia, Brazil.
ORCID: <https://orcid.org/0000-0003-1815-8650>
E-mail: ingredy.cs@gmail.com

Jainara Santos Freitas

Professor of Nursing at the Tiradentes University, Aracaju, Brazil.
ORCID:0000-0003-2713-3535
E-mail: enfjainara@hotmail.com

Manuela de Carvalho Vieira Martins

Master student, Health and Environment Graduation Program, Tiradentes University. Professor of Nursing at the Tiradentes University, Aracaju, Brazil.
ORCID: <https://orcid.org/0000-0003-1222-5955>
Email: manuela.cvm@hotmail.com

Rodrigo Gallotti Lima

PhD, Teaching Department, Federal Institute of Education, Science and Technology of Sergipe,
Aracaju, Brazil.

ORCID: <https://orcid.org/0000-0002-0786-7358>

E-mail: florafertil@yahoo.com.br

Virgínia Ramos dos Santos Souza

Ph.D. at the Federal University of Bahia, Professor at the Federal University of Bahia, Brazil.

ORCID: <https://orcid.org/0000-0003-4246-4332>

E-mail: virginia.ramos@ufba.br

Gilberto Tadeu Reis da Silva

Post-doctorate in Health Sciences Teaching, Full Professor at the Federal University of Bahia. Brazil.

ORCID: 0000-0002-0595-0780

E-mail: gilberto.tadeu@ufba.br

Abstract

Objective: to report nurses experiences at reference hospital in the care of patients diagnosed with COVID-19 in the state of Sergipe, Brazil. **Method:** descriptive study, of the experience report type, about nurses' experience in assisting patients diagnosed with COVID-19 in the hospital environment. **Results:** The nurses' experiences were structured into three categories: Structural and organizational changes in the hospital service; Nurse's work routine on the front line in the respiratory area; Main difficulties for nurses in caring for patients in the respiratory area and experienced opportunities. The positive aspects identified were participation in training and support for newly hired professionals. **Conclusion:** the COVID-19 pandemic changed economic, political, social and health care behavior. In addition, changes in the hospital environment demanded a reorientation of workflows, impacting nurses' mental health and suffering.

Keywords: Coronavirus infections; Pandemics; Hospital Nursing Service.

1. Introduction

With the advent of the SARSCoV-2 pandemic, in March 2020, there were significant impacts on society, economics and politics worldwide, as well as changes in the way health care is produced, which go beyond the context Restroom. Above all, the simultaneous occurrence and the implementation of new measures for the control of the disease that greatly interfere in the organizational dynamics of the Countries with regard to consumer relations (WHO, 2020; Velavan; Meyer, 2020).

The consequences of the spread of SARS-COV2 and COVID-19 are wide-ranging in scope in the short, medium and long term, and have been imposed as new challenges for governments and society. They are worrisome for several reasons, including because they highlight the limits of globalization and scientific and technological advancement (Sarti et al., 2020).

In Brazil, the increase in the number of serious cases and in the mortality of people affected by COVID-19 makes the public health panorama even more worrying. The Brazilian health care scenario has limitations resulting from the increased prevalence of chronic non-communicable diseases, population aging, disease outbreaks and reemergence of communicable diseases such as dengue and measles (Batista et al., 2020).

Thus, with this more demand, the operationalization of surveillance systems often works under pressure, in the need to provide quick, effective and timely responses to the various situations imposed by this new epidemiological scenario. In order to understand the pattern of the disease in the municipalities and in order to support decision-making within the scope of health management (Andrade et al., 2020).

At the same time that the health systems and the economy of several countries advance and collapse, this pandemic has given rise to painful reflections, as it causes thousands of human losses and shows the vulnerability of individuals due to the rapid contagion or the low specificity of prognosis and therapy. Which succumbs to the need for actions aimed at better preparation, coordination and monitoring of these cases in health services (Davidson; Szanton, 2020).

In addition, in general, the mental health of health workers is affected in the current pandemic context. Health professionals deal with psychological stress on a daily basis, as a result of preventive measures and health care for people affected by COVID-10, in an uncertain scenario and of such constant pressure that it has favored illness due to anxiety and depression (Bohlken et al., 2020).

Given this context, this study aims to report experiences of nurses working in a reference hospital in the care of patients diagnosed with COVID-19 in the state of Sergipe, Brazil.

2. Methodological Procedures

It is a report of nurses' experience in direct care for patients diagnosed with COVID-19 in the hospital environment. This medium complexity hospital unit is part of the health care network in the state of Sergipe and provides intensive care beds for people with COVID-19. The reported experiences reflect the experiences, experiences and reflections of nurses from the date of declaration of the pandemic by the WHO (March 17, 2020) until mid-June of that year. It is worth mentioning that in this study there was no need to apply and accept the Free and Informed Knowledge Term, as it is an experience report.

3. Results and discussion

This article is based on the report of nurses who are at the forefront of care for patients with COVID-19. The following categories are presented and discussed: 1) Structural and organizational changes in the hospital service; 2) Nurse's work routine on the front line in the respiratory area; and 3) Main difficulties in caring for patients in the respiratory area and experienced opportunities.

Structural and organizational changes in the hospital service

In the scenario of the absence of a vaccine for SARS-COV-2 and specific pharmacological treatment for COVID-19, as proven effective and effective recommendations to reduce the transmission of the virus are physical distance, use of face masks, eye protection and washing / sanitization of hands. Thus, the social

isolation imposed by administrative decrees was one of the actions to confront the COVID-19 pandemic in Brazil. In addition to this, emerged and organizational changes were instituted in the hospital environment, registered in March 2020, so that faster control responses could be provided to the population (Derek et al., 2020).

It is noted that the incidence rates are dynamic worldwide, requiring constant and rapid rearrangements and reassessments in the face of the public health scenario, the severity of the disease and its virulence character (Velavan; Meyer, 2020). In this sense, although it was an emergency situation already expected in that hospital, these changes occurred and organizational were implemented in an incipient, vertical and normative way, in less than twenty-four hours, which required health professionals to quickly adapt to this new work process.

The first major structural change occurred in the flow of hospital bed management and was based on the adequacy of the clinical division of users by pathology. Before the pandemic, the inpatient sector was divided into two areas: one for clinical hospitalization, the majority of patients with chronic diseases, and another for care and hospitalization of surgical patients who could be in pre or postoperative, mostly elective surgeries. However, after the pandemic was decreed, the hospital's management allocated the area of clinical internment to the care of people with a suspected or confirmed diagnosis of COVID-19. Two new large areas were created: one for patients with respiratory symptoms and another for the assistance of hospitalized users without respiratory symptoms.

An international study carried out by Singhal (2020), analyzed the structural and organizational changes in bed flows for patients affected by the disease, one of which is the obligation to report confirmed cases to local health regulatory agencies. He also spoke about the institution of conducts that aim to reduce the transmission of the virus among hospitalized patients, since they are already immunologically compromised and, therefore, with a greater predisposition to the spread and contagion by other diseases, including by COVID-19.

Nurse's work routine on the front line in the respiratory área

Recently, some actions in the unit's work routine were specified in the care and safety protocols adopted by the service as being exclusive to nurses, such as swab collection for COVID-19 tests and laboratory tests such as blood counts. These activities, formerly the responsibility of the laboratory's employees, were redistributed to the nurses of the unit after the reduction in the number of employees, which is yet another measure for infection control. The demands related to the management of the unit, which were already considered private to the nurse and included the organization and planning of actions, also became more numerous and started to be carried out electronically, in order to reduce the printing of medical records and optimize the time in decision making for referrals in care management.

Currently, the work routine of the assisting nurse in the inpatient unit has been basically the following: when entering the service he is directed to the pharmacy sector, where he receives a kit of Personal Protective Equipment (PPE) containing a surgical mask, a N95 mask, a face shield, a hat, a waterproof apron, a cloak, a pair of thongs and two pairs of gloves. PPE is essential material, however, sometimes made available incomplete or even damaged, which is an important obstacle to patient and worker safety from the perspective of risk management. This situation does not observe the national

normative and legal frameworks for the protection of workers, as well as enhancing professional stress due to the imminent risk of contamination and transmission to SARSCOV-2 / COVID-19 family members.

After the moment of systematization of care in the planning of priority actions, the visit to the bed begins with the assessment of hospitalized users (bed run), essential for the management of care, clinic management, risk management and patient safety. Life maintenance care such as bathing, providing food and other measures that meet the basic needs of the human being are the responsibility of the nursing team, under the supervision of the nurse, and were usually performed in the presence of the companion, who assisted in communication possible complaints or complications with the patient quickly. However, the presence of companions was forbidden to avoid crowding people, thus increasing the workload of the nursing team.

It is a context that aggravates the existing work overload, while increasing the vulnerability of these professionals, which can generate consequences beyond physical condition and contribute to problems related to mental health. As corroborated by a study by Allsopp and collaborators (2020) about the mental impact resulting from a major disaster, it has a devastating effect, which can extend over a long period of time, when compared to physical injuries. It is, therefore, evident the potentialization of the work overload of nursing professionals over working hours that vary from 6 to 12 hours. And, pointed out by another research (Luo et al., 2020) that the psychological impact on health professionals due to the COVID-19 pandemic includes increased anxiety, depression, panic attacks or psychotic symptoms.

Main difficulties in caring for patients in the respiratory area and opportunities experienced

Several difficulties were observed related to the nurse's work process in healthcare practice, including the emergence of conflicts between members of the nursing team or even among members of the multidisciplinary team. Most of the time, these conflicts were related to the lack of standardization of the activities of each social actor in the production of care in the hospital organization. Linked to this, the occurrence of losses in the communication and integration of team members due to the fragmentation of the assistance offered, as a result of the tension generated by the lack of knowledge about the disease and the deficit in training and in the quality of training provided by management.

Added to this is the dynamism in changing protocols for user management with COVID-19, since changes have been made daily, without time to assimilate them. The redirection of care and organizational work processes requires collective effort, in the sense of constantly (re) evaluating and restructuring them and, consequently, of ensuring the safety of patients and nursing professionals (Moraes et al., 2019).

The working conditions offered to professionals who are at the forefront of the care of patients with COVID-19 were precarious and result from the architectural inadequacy and the uninterrupted use of PPE. In this way, basic needs (drinking water, food and eliminations) are compromised by structural barriers (unavailability of a bathroom or drinking fountain) in the inpatient area and by the fear of contamination at the time of eviction.

The working conditions imposed on professionals who are at the forefront of caring for patients with COVID-19 were also the object of criticism, due to the frequent deprivation of basic human needs, in the absence of an adequate infrastructure in the inpatient unit (Oliveira et al., 2020). Associated with the

fear of contamination at the moment of deparation, a difficulty that influences and compromises the fulfillment of your needs.

The number of recommendations for increasing patient safety and containing the transmission of the virus has increased, as has the number of hours worked. These elements, together, aggravate stress and anxiety and contribute to the deterioration of the mental health of these professionals, who, in addition to the fear of contagion, fear to transmit the virus to their families.

In this context, there have been frequent reports of fear, anxiety, tachycardia, sleep deprivation before shifts and burnout, as well as uncertainty and insecurity, not only during work, but also at home, due to the risk of contamination of family members. Thus, many nurses moved away from family life during this period in the name of the safety of loved ones, however, aggravating mental suffering in favor of the profession and permanence in employment. On the other hand, also in this moment of fears, uncertainties and deprivations of professionals, some opportunities have emerged, for example, training and the possibility of sharing information and knowledge with newly hired professionals. There was also the management of new technologies, hitherto not used in the hospital environment, and the experience of the invaluable experience of helping others and fighting for a collective good.

4. Conclusion

The COVID-19 pandemic imposed behavioral, economic, political, social changes and also in the scope of systems and health care. In addition, the measures implemented in the hospital environment due to the pandemic required a complete reorientation of workflows, in order to provide faster and more effective responses. Such organizational and health care changes have strengths and weaknesses related to the work process of the nurse who works at the forefront of combating COVID-19 in the hospital environment.

The work of nurses / nursing staff, which is usually invisible and little valued in society, currently has the opportunity to be recognized for the care provided at the bedside and the management of health actions in care management. In the international year of nursing, in which Florence Nightingale's bicentenary is being celebrated, we are finally witnessing the strengthening of the role of the nursing team. In this pandemic scenario, professionals can claim appreciation and better working conditions, as society has had contact with the specificity of nursing professionals' actions, which is essential for human beings.

5. References

Allsopp, Kate et al. Responding to mental health needs after terror attacks. *Bmj*, v. 366, 2019. <https://doi.org/10.1136/bmj.l4828>.

Andrade, Lucas Almeida et al. Surveillance of the first cases of COVID-19 in Sergipe using a prospective spatiotemporal analysis: the spatial dispersion and its public health implications. *Revista da Sociedade Brasileira de Medicina Tropical*, v. 53, 2020. doi: 10.1590 / 0037-8682-0287-2020.

Batista, Francisca Miriane de Araújo et al. COVID-19 no Piauí: cenário inicial e perspectivas de enfrentamento. *Revista da Sociedade Brasileira de Medicina Tropical*, v. 53, 2020. DOI: 10.1590/0037-8682-0175-2020.

Bohlken, Jens et al. COVID-19 pandemic: stress experience of healthcare workers-a short current review. *Psychiatrische Praxis*, v. 47, n. 4, p. 190-197, 2020. DOI: 10.1055 / a-1159-5551.

Conselho Federal De Enfermagem. Parecer normativo COFEN nº 02/2020 – exclusivo para vigência da pandemia – covid-19. Brasília/DF, 2020.

Davidson, Patricia M.; Szanton, Sarah L. Nursing homes and COVID-19: We can and should do better. 2020. DOI: 10.1111 / jocn.15297.

Derek, K Chu et al. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *Lancet* 2020; 395: 1973–87. June 1, 2020. DOI: [https://doi.org/10.1016/S0140-6736\(20\)31142-9](https://doi.org/10.1016/S0140-6736(20)31142-9).

Luo, Min et al. The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public—A systematic review and meta-analysis. *Psychiatry research*, p. 113190, 2020.doi: 10.1016/j.psychres.2020.113190.

Moraes, Kátia Bottega et al. Transferência do cuidado de pacientes com baixo risco de mortalidade no pós-operatório: relato de experiência. *Revista Gaúcha de Enfermagem*, v. 40, n. SPE, 2019. <http://dx.doi.org/10.1590/1983-1447.2019.2018039>.

Oliveira, Wanderlei Abadio de et al. Impactos psicológicos e ocupacionais das sucessivas ondas recentes de pandemias em profissionais da saúde: revisão integrativa e lições aprendidas. *Estud. Psicol. (Campinas, Online)*, p. e200066-e200066, 2020. <http://dx.doi.org/10.1590/1982-0275202037e200066>.

Sarti, Thiago Dias et al. “What is the role of Primary Health Care in the COVID-19 pandemic?.” “Qual o papel da Atenção Primária à Saúde diante da pandemia provocada pela COVID-19?.” *Epidemiologia e serviços de saúde: revista do Sistema Único de Saúde do Brasil* vol. 29,2 (2020): e2020166. DOI:10.5123/s1679-49742020000200024

SHI, Yudong et al. Knowledge and attitudes of medical staff in Chinese psychiatric hospitals regarding COVID-19. *Brain, Behavior, & Immunity-Health*, v. 4, p. 100064, 2020. DOI:10.1016/j.bbih.2020.100064

Singhal, T. A Review of Coronavirus Disease-2019 (COVID-19). *Indian J Pediatr* 87, 281–286 (2020). <https://doi.org/10.1007/s12098-020-03263-6>

Velavan TP, Meyer CG. A epidemia de COVID-19. *Trop Med Int Saúde* . 2020; 25 (3): 278-280. DOI i: 10.1111 / tmi.13383

WHO. Coronavirus disease (COVID-2019) situation reports. 2020. [cited 2020 mai 08]. Available from: [https:// www.who.int/docs/default-source/coronaviruse/ situation-reports/20200401-sitrep-72-covid-19.pdf?sfvrsn=3dd8971b_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200401-sitrep-72-covid-19.pdf?sfvrsn=3dd8971b_2) 2. Parmet WE, Sinha MS. Covid-19