







## **NURSE'S PROTAGONISM IN STRUCTURING AND MANAGING A SPECIFIC UNIT FOR COVID-19**

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### **ABSTRACT**

**Objective:** to report the experience in the structuring and managing process of a specific unit for COVID-19, highlighting the role of nurses in decision-making.

**Method:** an experience report on the creation and management of the *Coronavirus Disease 2019* (COVID-19) unit, in March 2020, in 2020, in a philanthropic hospital of the state of Santa Catarina.

**Results:** the unit was structured with 10 intensive care beds and 20 infirmary beds. Meetings were held to make decisions, as well as to create protocols and flows with active participation of the nurse. In questions related to direct assistance, adaptations were developed in the nursing process performed at the hospital and the organization of new flows and routines. The physical space was structured, considering the high risk of transmissibility for the disease. Professionals were hired with staffing readjustment according to the complexity of the service, making up a team of professionals with experience in critical care. There were trainings for developing knowledge and skills prior to the first cases, which were systematically maintained. In addition, it was observed that the nurses were concerned about the mental health of the professionals working in this unit and, therefore, support actions were programmed.

**Conclusion:** the foundation in the scientific evidence and recommendations of the competent bodies at the world and national levels for the structuring of the COVID-19 unit is emphasized. The role of the nurse in all the interfaces stands out, assuming a fundamental role from the composition of the commissions, going through the planning and functioning of the physical structure, management of human resources, and construction of care protocols and flows, in addition to acting directly in the care provided.

**DESCRIPTORS:** Nursing. Leadership. Risk management. Patient care management. Coronavirus infections.

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# PROTAGONISMO DO ENFERMEIRO NA ESTRUTURAÇÃO E GESTÃO DE UMA UNIDADE ESPECÍFICA PARA COVID-19

## RESUMO

**Objetivo:** relatar a experiência no processo de estruturação e gestão de uma unidade específica para COVID-19, ressaltando o protagonismo do enfermeiro nas tomadas de decisão.

**Método:** relato de experiência sobre a criação e a gestão da unidade *Coronavirus Disease 2019* (COVID-19), em março de 2020, em um hospital filantrópico do Estado de Santa Catarina.

**Resultados:** a unidade foi estruturada com 10 leitos de terapia intensiva e 20 de enfermaria. Realizaram-se reuniões para a tomada de decisões, criação de protocolos e fluxos com participação ativa do enfermeiro. Nas questões relacionadas à assistência direta, desenvolveram-se adaptações no processo de enfermagem realizado no hospital e ordenamento de novos fluxos e rotinas. O espaço físico foi estruturado, considerando-se o alto risco de transmissibilidade da doença. Realizou-se contratação de profissionais com readequação do dimensionamento conforme a complexidade do serviço, formando-se uma equipe de profissionais com experiência em cuidados críticos. Houve treinamentos para o desenvolvimento de conhecimentos e habilidades anteriormente aos primeiros casos, que foram mantidos sistematicamente. Ademais, observou-se preocupação dos enfermeiros com relação à saúde mental dos profissionais atuantes nesta unidade e, portanto, programaram-se ações de suporte.

**Conclusão:** enfatiza-se o alicerce nas evidências científicas e recomendações dos órgãos competentes a níveis mundial e nacional para a estruturação da unidade COVID-19. Destaca-se o protagonismo do enfermeiro em todas as interfaces, o qual assume papel fundamental desde a composição das comissões, perpassando pelo planejamento e funcionamento da estrutura física, gestão de recursos humanos e construção de protocolos e fluxos de cuidado, além de atuar diretamente na assistência.

**DESCRITORES:** Enfermagem. Liderança. Gestão de riscos. Administração dos cuidados ao paciente. Infecções por coronavírus.

# PROTAGONISMO DEL ENFERMERO EN LA ESTRUCTURACIÓN Y GESTIÓN DE UNA UNIDAD ESPECÍFICA PARA COVID-19

## RESUMEN

**Objetivo:** reportar la experiencia en el proceso de estructuración y gestión de una unidad específica para COVID-19, destacando el protagonismo del enfermero en la toma de decisiones.

**Método:** informe de experiencia sobre la creación y gestión de la unidad *Coronavirus Disease 2019* (COVID-19), en marzo de 2020, en un hospital filantrópico del estado de Santa Catarina.

**Resultados:** la unidad se estructuró con 10 camas de cuidados intensivos y 20 de enfermería. Se realizaron reuniones para tomar decisiones y crear protocolos y flujos con participación activa del enfermero. En las cuestiones relacionadas con la asistencia directa, se desarrollaron adaptaciones en el proceso de enfermería realizado en el hospital y se organizaron nuevos flujos y rutinas. Se estructuró el espacio físico, en vistas del elevado riesgo de transmisibilidad de la enfermedad. Se contrataron profesionales con readequación de número según la complejidad del servicio, conformándose así un equipo de profesionales con experiencia en cuidados críticos. Se realizaron sesiones de capacitación para el desarrollo de conocimientos y habilidades antes de que surgieran los primeros casos, que se mantuvieron sistemáticamente. Además, se observó cierta preocupación entre el personal de Enfermería con relación a la salud mental de los profesionales actuantes en esa unidad y, por lo tanto, se programaron acciones de apoyo.

**Conclusión:** se forjan las bases sobre las evidencias científicas y las recomendaciones de los organismos competentes a nivel mundial y nacional para la estructuración de la unidad COVID-19. Se destaca el protagonismo de los enfermeros en todas las interfaces, quienes asumen un rol fundamental desde la composición de las comisiones, pasando por la planificación y el funcionamiento de la estructura física, la gestión de recursos humanos y, finalmente, la elaboración de protocolos y flujos de atención, además de su actuación directa en la asistencia provista.

**DESCRITORES:** Enfermería. Liderazgo. Gestión de riesgos. Manejo de Atención al Paciente. Infecciones por coronavirus.

## INTRODUCTION

In different spaces and levels of health care, the role of the nurse is revealed in the coordination and management of teams and services. Currently, nursing constitutes more than half of the health workforce.<sup>1</sup> Given the relevance of such a professional, the World Health Organization (WHO), in partnership with the International Nurses Council (INC) and the All-Party Parliamentary Group on Global Health (APPG), from the United Kingdom, launched the *Nursing Now* Campaign in search for valuing the role of nursing. The campaign was supported by more than 30 countries, commemorating the bicentenary of Florence Nightingale,<sup>2</sup> precursor of modern nursing.

However, in the midst of the *Nursing Now* Campaign, the world faced the emergence of a new disease, the *Coronavirus Disease 2019* (COVID-19), which has become a serious public health problem, resulting in several challenges for nursing. In December 2019, after cases of atypical pneumonia recorded in China, in the city of Wuhan, a new virus from the coronavirus family, called *Severe Acute Respiratory Syndrome 2* (SARS-CoV-2) was discovered, which causes COVID-19. Since then, with the spread of the disease in the continents, on March 11<sup>th</sup>, 2020, the WHO determined a global pandemic situation.<sup>3</sup>

In Brazil, a Public Health Emergency of National Importance was declared in order to implement actions to combat and minimize the increase in the number of cases, seeking to raise awareness among the population and to disseminate preventive measures to contain and reduce the growth curve of the disease.<sup>4</sup>

In this context, nursing presents itself with the excellence of a profession of authentic higher education, working on several fronts in the fight against the pandemic. Thus, nurses emerge in a way similar to other historical moments in which epidemics and catastrophes affected the population, putting themselves at risk to carry out health care, exposing themselves to the SARS-CoV-2 virus, given their long working hours.<sup>3</sup>

To confront COVID-19, the federal, state, and municipal governments sought strategic solutions in order to structure their services and health teams to face the disease. Given the actions taken in the organization and operation of a unit to assist individuals diagnosed with or suspected of having COVID-19, in which the role of the nurse became visible and relevant, this article emerged with the objective to report the experience in the structuring and management process of a specific unit for COVID-19, highlighting the role of the nurse in decision making.

## METHOD

This is an experience report that describes the organization of a care unit for individuals diagnosed with or suspected of having COVID-19 in a philanthropic hospital with approximately 290 beds and in the process of expanding its physical structure, located in a municipality of the state of Santa Catarina, Brazil, being a regional reference for more than one million inhabitants. Such service was created in March 2020, facing the pandemic, in which the relevance of the nursing professional became evident, in the management scope, during the structuring process of a new unit to assist COVID-19 victims, with clinical and intensive care beds.

The actions described in this study were obtained from the professional experience of the authors and from scientific discussions with other team members, who participated in the structuring of the unit and who work on site. The change and decision making processes related to political, social, and economic aspects that involved the organization of the new unit will be highlighted, as well as the creation of new operational and clinical flows and protocols adopted, the management of human resources, training, and care management.

## STRUCTURING AND MANAGING PROCESS OF A SPECIFIC UNIT FOR COVID-19 AND THE NURSE'S PROTAGONISM

The political insertion of nurses in the health scenario in Brazil started to materialize from the structuring of the Unified Health System (*Sistema Único de Saúde, SUS*), when nursing started to be understood as part of a social structure, with participation in changes in the health policies that translate into actions aimed at the citizenship and at health promotion. Therefore, in the nurses' training process, it is expected that knowledge based on criticality and professional reflective capacity will be delineated with respect to the baseline elements of a society from the political, social, economic, and cultural perspectives. Thus, there is a demand for curricular changes, when seeking to adjust to the requirements of the professional profile of nurses in Brazil, thus discussing the new directions for the valorization of nursing within the health teams.<sup>5</sup>

In view of the above, due to the pandemic of COVID-19, in the reality of a municipality in the western region of Santa Catarina, it is possible to highlight the role of the nurse in the crisis context. Therefore, given the risk for dissemination of the SARS-CoV-2 virus, on March 18<sup>th</sup>, 2020, the municipal public management decreed a lockdown in the city, which consisted of closing stores and companies considered non-essential, temporary suspension of inter-municipal public transport, and measures for social isolation and distancing.

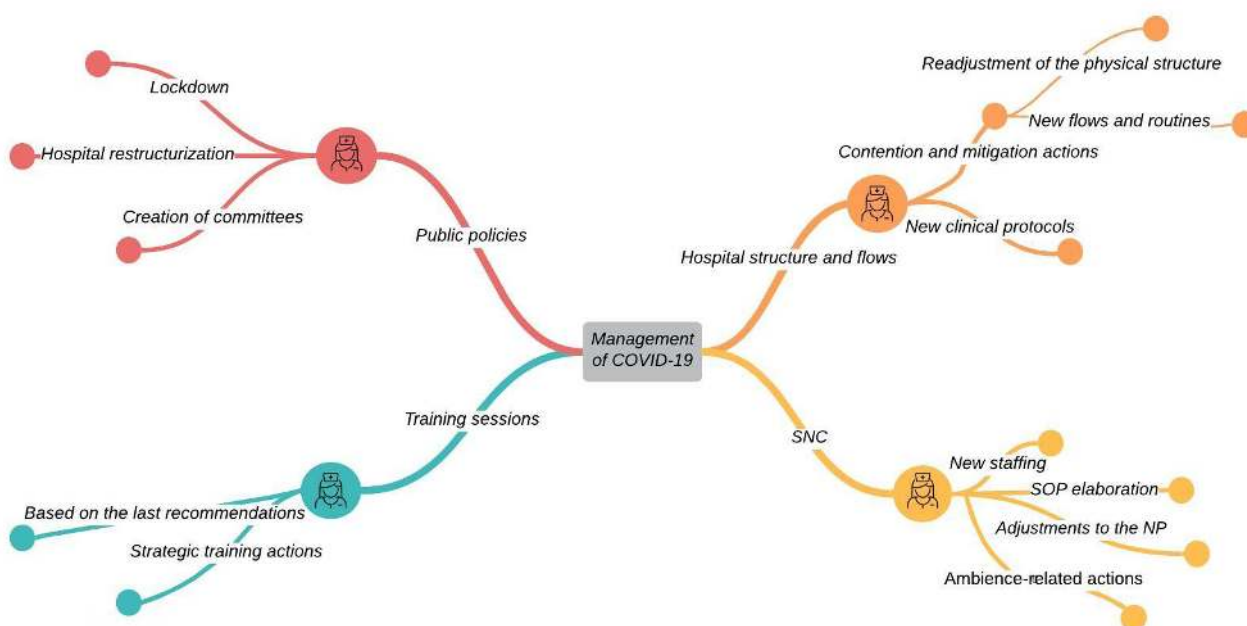
Two days before the lockdown has been implemented, managers, interprofessional specialists in the area of infection control, physicians and nurses from the Intensive Care Unit (ICU) and from the first-aid clinic of the region's reference hospital, together with representatives from the Municipal Health Secretariat (MHS) and the 4<sup>th</sup> Health Regional (HR) of the State of Santa Catarina, met to discuss and deliberate about the management of the first cases of COVID-19 in the municipality. For this purpose, the COVID-19 Center and Committee were created, with representatives from the hospital team, the MHS and the 4<sup>th</sup> HR.

The group's first discussion was related to the definition of the physical space, in which it was decided to structure a unit to care for individuals with a suspected or confirmed COVID-19 diagnosis at the hospital's headquarters, on a floor that was unoccupied due to the transfer of the oncology service for a new sector built up at the institution. Thus, the opening of 10 ICU beds and 20 infirmary beds was defined.

The management teams, represented by nurses from the hospital, started to meet three times a week in order to debate and evaluate the implemented measures, as well as to discuss the new demands raised daily by the front line professionals, with the decisions being aligned with the recommendations imparted by the WHO, the Brazilian Intensive Care Association (*Associação de Medicina Intensiva Brasileira, AMIB*) and the Ministry of Health (*Ministério da Saúde, MS*).

Then, considering the immersion of nurses in the management of the structured political decisions in the municipality for attention in the pandemic situation, some specific questions for nursing emerged regarding the dimension of the Systematization of Nursing Care (SNC), with regard to the operational and clinical flows. In this context, these professionals became protagonists in managing the ambience, staffing, care, training, and psychological support to the teams (Figure 1).

In this scenario, on March 20<sup>th</sup>, 2020, and as a regulatory body for the nursing practices, the Federal Council of Nursing (*Conselho Federal da Enfermagem, COFEn*) published guidelines against COVID-19 for nursing services. Issues related to the SNC were addressed, including the creation of a rapid response team, structuring of reception points for individuals with respiratory conditions, and other adjustments for nursing care in the face of the crisis, providing greater safety to the professionals.<sup>6</sup>



**Figure 1** – Protagonism of the nurse on different management fronts in the fight against COVID-19. Chapecó, Santa Catarina, Brazil, 2020.

Thus, with regard to the operational flows that deal with the various aspects of care, the performance of the nurse in their clinical work was highlighted, as well as in the organization of the ambience about a vital issue, in facing this phenomenon of high potential for transmissibility, resolving resolute decisions regarding the structuring of physical areas defined as “clean” and “contaminated”.

Whereas COVID-19 is an infectious disease, the pathogenesis of which has not been fully elucidated, with high transmissibility, considerable lethality, without specific drugs and vaccines available,<sup>7</sup> a list of non-pharmacological measures is recommended to mitigate the disease in health care environments, with emphasis on hygiene and disinfection measures in the environment; detection and early notification of suspected cases; isolation measures in the health services; and use of personal protective equipment (PPE).<sup>8</sup>

Notwithstanding, different accesses were established in the new unit for the entrance of diagnosed individuals and for employees, as well as physical facilities for putting on/taking off the PPE and bathing of the professionals. It was settled that, after the end of the work shift, the professional should take off the PPE, perform hand hygiene, and take a shower. In addition, the removal procedures should be monitored by a colleague, in order to detect any flaws in the process, aiming at correcting the situation. An area was created to feed the employees within the COVID-19 unit in order to prevent them from passing through the collective cafeteria and being able to remain at the workplace during working hours. The nurse’s management in the ordering of these new flows is emphasized.

In terms of severity, the COVID-19 pandemic has shown itself as one of the most overwhelming of recent times. The ease of transmission of the new coronavirus, which occurs from person to person, contributes to this fact, through autoinoculation in mucous membranes or viruses found in fomites, i.e., contaminated inanimate objects.<sup>9</sup> Thus, the strategies adopted at the institution were important human protection measures, seeking to prevent contamination of the workers.

As for the staffing, the role of the nurse manager placed them in a position to argue with the hospital institution’s administration on the demand for more professionals, considering the new care facilities, mainly emphasizing the level of complexity of the care provided to individuals with suspected or confirmed COVID-19 diagnoses. In this sense, it was also decided to adopt the strategy



of relocating a number of experienced professionals in intensive care assistance from the hospital to the COVID-19 unit, recruiting new employees to replace them. Finally, it was decided to grant a bonus to the health professionals and support teams working in the COVID-19 unit, in the form of a salary bonus, for stimulating and valuing the workers.

It is worth mentioning that, due to the high transmission rate of COVID-19, health professionals are at a high risk of contracting the infection, especially during ventilatory care. Therefore, it is necessary to compose trained teams with an ideal number of professionals, at the same time that it is indicated to limit the number of health professionals in contact with individuals with confirmed or suspected COVID-19 diagnoses, having a team that acts exclusively with this population in order to minimize the risk of transmission.<sup>10</sup>

The Standard Operating Procedures (SOPs) were all adequate to assist in COVID-19 suspected/confirmed cases. New flows were outlined, and specific clinical protocols were created by teams of specialists, with the presence of nurses in this process being remarkable. In this sense, teams and organizations constantly need to adapt to times of greater demand and complexity.<sup>11</sup> Therefore, the adequacy of protocols and flows is essential to face the pandemic. It is also relevant that such changes start before the first cases, being reassessed daily.

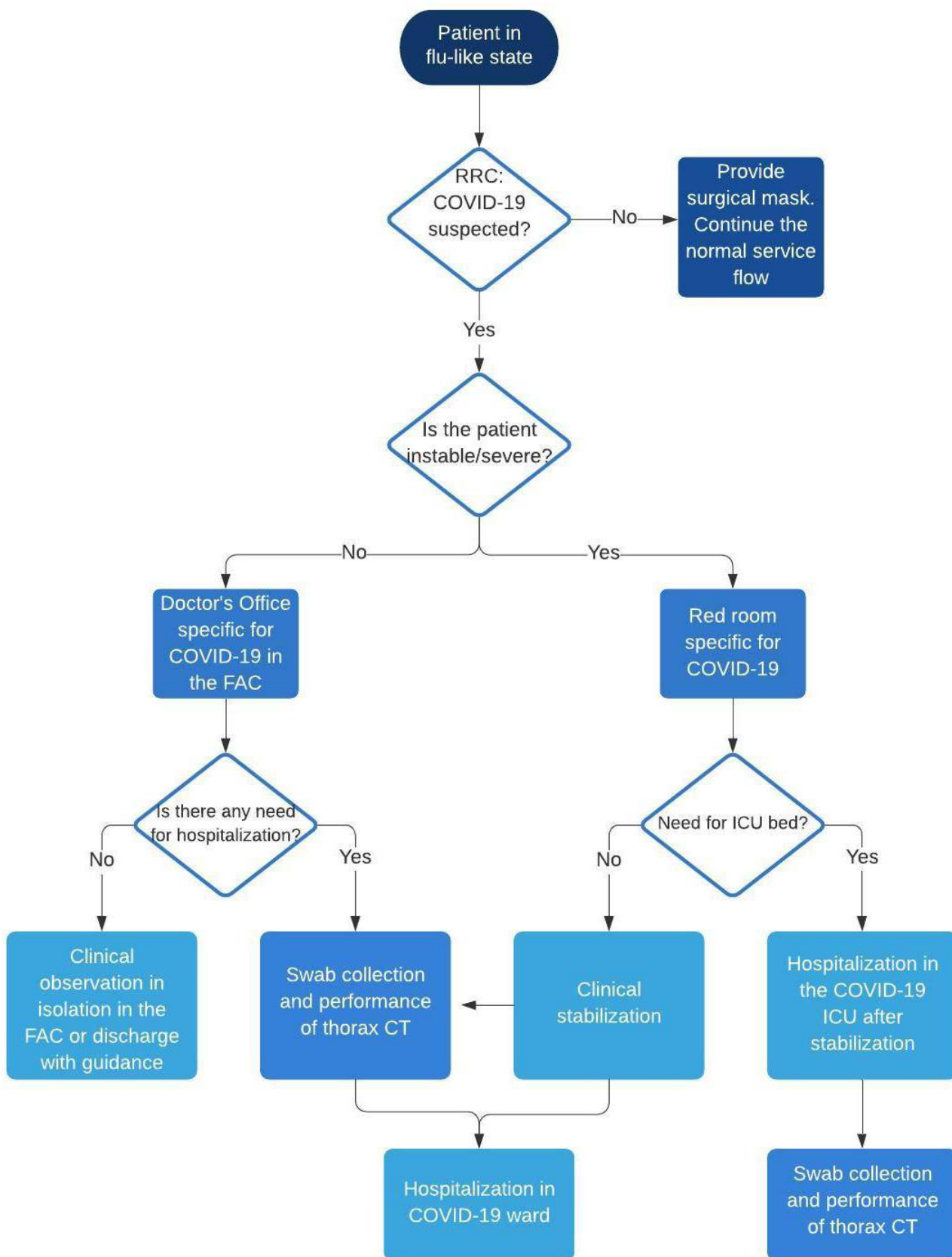
Corroborating the preliminary actions developed in this experience, teams from the Royal Free Hospital, a referral hospital for highly infectious diseases in London, also adapted their SOPs, as well as they assessed potential and latent risks prior to the first COVID-19 case in the institution. The changes were proposed after training sessions in realistic simulation, which served as a basis to guide the new protocols.<sup>12</sup>

The flow of urgency and emergency care at the service was also the focus of analysis for nursing decisions and, consequently, the flowchart shown in Figure 2 was designed.

In this context of direct care for individuals with COVID-19, based on the methodology of the Nursing Process (NP), the nurses made the necessary adaptations for the operationalization of its stages. In the hospital institution in question, the NP is implemented in all its stages, supported by Standardized Language Systems: North American Nursing Diagnosis-International (NANDA-I), Nursing Outcome Classification (NOC), and Nursing Interventions Classification (NIC). When faced with the difficulty of obtaining information from family members in the composition of the records for the Nursing History, as a result of the restriction of movement of people in the unit to prevent the spread of the virus, they began to seek such information by making telephone calls. However, the professionals made it explicit that the results were not the same, but that they certainly helped.

In caring for the individual with COVID-19, a preponderant priority in the management of the nurse is to provide training on an ongoing basis. In this regard, it is a WHO recommendation to structure in-service training, preferably prior to the effective start of activities with diagnosed or suspected individuals, as well as systematic, as new needs and technical and scientific updates are perceived.

The international literature has shown that developing clinical training with teams, especially with active and innovative teaching methods, is effective in increasing the safety of the teams, while decreasing the anxiety of the professionals in dealing with something new.<sup>12-13</sup> Within this perspective, *in loco* training has been recommended by the WHO, by the Centers for Disease Control (CDC), and by the MS as one of the pillars for controlling the spread of the SAR-CoV-2 virus in the health services and for the protecting workers.<sup>14-16</sup>



**Figure 2** – Flowchart of the service provided to the suspected COVID-19 cases. Chapecó, Santa Catarina, Brazil, 2020. RRC: Reception with Risk Classification, performed by the nurse by means the adapted Manchester protocol; FAC: First-Aid Clinic; CT: Computerized Tomography; ICU: Intensive Care Unit.

For the operationalization of training in the hospital under study, a team of nurses working in the institution's permanent education center and in the coordination of the ICU, of the hospital infection control service, and of the safety engineering and occupational Medicine service carried out small working groups with the workers, in all the shifts, avoiding crowding, but trying to reach the largest number of professionals. Another potentially favorable strategy was the recording of videos, for example, addressing how to put on and to remove the PPE, which was sent to the professionals. Filming an educational video is a relevant tool for the performance of nurses in their actions, being a feasible method for the learning of health professionals.<sup>17</sup>

The themes covered in the training followed the recommendations of the Brazilian MS and of the AMIB. The training focused on the teams addressed the following: clinical treatment of the individual with COVID-19, with an emphasis on ventilatory assistance and care with the use of respiratory aid instruments, since many of them must be restricted to extremely necessary situations; care for preventing and controlling COVID-19 within the hospital environment; putting on and taking off the PPE, and *post mortem* body cares.

Moreover, the nurse's role in the care with the health team is a highlight, regarding the psychological stress of these professionals, involving the fear of being contaminated. The training sessions constituted an action with a positive impact on this problem, making them feel more secure and convinced that all the necessary apparatus to protect themselves would be made available, including skin protection due to the use of N95 respirators. An important strategy adopted by the hospital managers was to listen actively to the requests of the health professionals, seeking to welcome them and respond promptly to their needs. In addition, for the professionals having flu-like symptoms, a quick test was performed for COVID-19, but positive cases were not confirmed until the end of this work.

As previously, the absence of a specific treatment for COVID-19 and the uncertainties about the pathogenesis of the new virus can negatively impact on the mental health of the health care professionals. Therefore, from the beginning, managers and team leaders must recognize that the risk management of a unit or organization with high levels of psychological pressure requires involvement and action at all managerial levels. In this sense, negotiating priorities, comprehensive training, and strategies in a stressed organization require coordinated action among the senior management, the managers, and the frontline team.<sup>11</sup>

In view of the above, it is identified as an important opportunity to report successful experiences of nursing professionals who, in their daily work, are systematically demanded of protagonism, which, at times, can become little expressive. Thus, the current crisis in the health sector in the face of the pandemic has shown the excellence of the professional nurse.

## CONCLUSION

Considering the urgency of the decisions and actions to be taken in this pandemic scenario, the performance is emphasized of the managers and health professionals who were rigorously based on scientific evidence and recommendations from the competent bodies at the global and national level for the structuring of the COVID-19, abstaining from improvisations and provisional conducts.

In the COVID-19 pandemic and in this reported experience, the role of nurses in all the interfaces stands out. They assume a fundamental role from the composition of the commissions, going through the planning and functioning of the physical structure, management of trained human resources, and construction of protocols and care flows, in addition to acting directly in the care provided.



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## **NOTES**

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Discussion of the results: Bitencourt JVOV, Meschial WC, Biffi P.

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There is no conflict of interest.

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