

The implementation of a referral center for respiratory symptoms in the COVID-19 pandemic

La implementación de un centro de referencia para síntomas respiratorios en la pandemia COVID-19

A implementação de um centro de referência para sintomáticos respiratórios na pandemia de COVID-19

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Abstract

Objective: To describe the implementation of a Reference Center for Respiratory Symptomatic Patients (CRSR) during the COVID-19 pandemic. **Methodology:** This is a descriptive study, an experience report, describing the main aspects related to the structuring, execution, and biosafety of a CRSR in Santa Catarina. **Results and discussion:** The target audience is the residents of the municipality who have respiratory symptoms. Service is provided by a multi-professional team, previously trained and qualified. The patient is welcomed and classified by a nurse who proceeds with biosafety measures. Access to two patients at a time is limited to attendance with a nursing technician (registration, recording of symptoms and measurement of vital signs) for referral to medical consultation. Suspected cases of COVID-19 are reported to Epidemiological Surveillance for investigation. **Final considerations:** At the end of this report, the importance of knowledge sharing is understood and the role of nurses and the systematization of nursing care in the process of implementing a service is highlighted.

Descriptors: Pandemics; Coronavirus Infections; Community Health Nursing; Delivery of Health Care; Public Health.

Resumén

Objetivo: Describir la implementación de un Centro de Referencia para Pacientes Respiratorios Sintomáticos (CRSR) durante la pandemia de COVID-19. **Metodología:** Se trata de un estudio descriptivo, relato de experiencia, que describe los principales aspectos relacionados con la estructuración, ejecución y bioseguridad de una CRSR en un municipio de Santa Catarina. **Resultados y discusión:** El público objetivo son los vecinos del municipio que presentan síntomas respiratorios. El servicio es brindado por un equipo multiprofesional, previamente capacitado y calificado. El paciente es recibido y clasificado por una enfermera que procede con medidas de bioseguridad. El acceso a dos pacientes a la vez se limita a la asistencia de un técnico de enfermería (registro, registro de síntomas y medición de constantes vitales) para su derivación a consulta médica. Los casos sospechosos de COVID-19 se notifican a Vigilancia Epidemiológica para su investigación. **Consideraciones finales:** Al final de este informe se comprende la importancia del intercambio de conocimientos y se destaca el papel de las enfermeras y la sistematización de los cuidados de enfermería en el proceso de implementación de un servicio.

Descriptores: Pandemias; Infecciones por Coronavirus; Enfermería en Salud Comunitaria; Prestación de Atención de Salud; Salud Pública.

Resumo

Objetivo: Descrever a implementação de um Centro de Referência para Sintomáticos Respiratórios (CRSR) durante a pandemia da COVID-19. **Metodologia:** Trata-se de um estudo descritivo, do tipo relato de experiência, descrevendo os principais aspectos relacionados a estruturação, execução e biossegurança de um CRSR de um município de Santa Catarina. **Resultados e discussão:** O público-alvo são os moradores do município que apresentem sintomas respiratórios. O atendimento é realizado por uma equipe multiprofissional, previamente treinada e capacitada. O paciente é acolhido e classificado por um enfermeiro que procede com as medidas de biossegurança. Limita-se o acesso a dois pacientes por vez para atendimento com um técnico de enfermagem (cadastro, registro dos sintomas e aferição de sinais vitais) para encaminhamento à consulta médica. Casos suspeitos de COVID-19 são notificados à Vigilância Epidemiológica para investigação. **Considerações finais:** Entende-se ao final deste relato a importância do compartilhamento do conhecimento e destaca-se o papel do enfermeiro e da Sistematização da Assistência de Enfermagem no processo de implementação de um serviço.

Descritores: Pandemias; Infecções por Coronavírus; Enfermagem em Saúde Comunitária; Assistência à Saúde; Saúde Pública.



Introduction

The current pandemic of the new coronavirus (SARS-CoV-2), which causes Coronavirus disease 19 (COVID-19), generates intense concern for the population, health professionals, the scientific community, and managers. The World Health Organization (WHO) declared a Public Health Emergency of International Importance (ESPII) on January 30, 2020. However, on March 18, 2020, there were already more than 214 thousand confirmed cases of COVID-19 worldwide, while the strategic plans were not finalized and studies on the pathology were still initial and limited. The recommendations of WHO, the Ministry of Health (Brazil), the Centers for Disease Control and Prevention and other organizations suggested the replication of contingency plans for influenza, due to the clinical and epidemiological similarities of the viruses, providing for adjustments to the actions according to the evolution and severity of the current pandemic, based on the countries initially affected^{1,2}.

Efforts by different segments of society and health professionals have been taking place to prevent, treat and control the spread of the new coronavirus in Brazil and worldwide. Nursing professionals are at the forefront of this pandemic, as well as in previous public health problems. The nurse assumes an increasingly notorious, decisive, and efficient role in terms of identifying the population's care needs. In view of its undeniable relevance, nursing is understood as guiding the consistent and organized care process. It is also noteworthy that nursing as the protagonist of the health system, due to the number of professionals and their performance in care at all levels of care. According to the Brazilian Dra. Wanda Horta (1974), nursing is "the science and art of assisting the human being (individual, family and community), in meeting their basic needs"^{3,4}.

Data from other countries indicate that SARS-CoV-2 has high infectivity and there is still no immunization available, making it necessary for federative entities to accelerate the process of decision making and response to the pandemic. In Brazil, Law No. 13,979, enacted on February 6, 2020, brought the main measures to face the pandemic, mobilizing the entire Unified Health System and its professionals⁵.

Among other actions carried out, a municipality in Santa Catarina implemented a Reference Center for Respiratory Symptomatic Patients (CRSR) as a strategic action to combat COVID-19, led and developed by nurses from the municipality's Specialized Care Directorate and assistance nurses allocated to work in the CRSR. This study aimed to describe the implementation of the CRSR during the COVID-19 pandemic.

Methodology

This is a descriptive study, with a qualitative approach, of an experience report type, carried out by nurses working in a CRSR implemented in a municipality of Santa Catarina to assist the population during the COVID-19 pandemic.

The CRSR service is performed daily, during the day.

The team is composed of nurses, nursing technicians, doctors, social worker, general services / hygiene, and driver. The target audience comprises all residents of the studied municipality who have respiratory symptoms. Access is by spontaneous demand or referenced by other services. The reported activities were carried out in March and April 2020.

Despite the applied methodology dispensing the submission to an Ethics Committee, the principles and guidelines of Resolution No. 466, of December 12, 2012, of the National Health Council, were observed and respected, with regard to research with human beings, such as: the principles of autonomy, non-maleficence, beneficence, justice and equity, among others⁶. It should be noted that this study was previously authorized by the Municipal Health Secretariat.

Results and Discussion

Planning and initial questions

The arrival of COVID-19 in Brazil and the epidemiological bulletins from other countries referred to the professionals of municipal management the situation experienced in 2009 with the H1N1 pandemic, which triggered the implementation of services without prior planning, with regard to the work process and physical structuring. At the time, the main challenges were a consequence of the short period between the peak of contamination and the implementation of a structured service for the current health specificity. Based on this experience, the technical team of the Specialized Care Department, in line with Primary Care, prepared a Contingency Plan to respond to the pandemic of COVID-19, planning the implementation of the CRSR, to be located in a centralized environment for better patients' accessibility.

In the first stage, the history of the Reference Center for H1N1, implemented in 2009 in the municipality, was recovered, based on the experiences of one of the authors, who actively participated in the decision-making processes in municipal management. On 13 March this year, Municipal Decree No. 13204/2020 was issued, establishing the "Crisis Management Office, to face the new Coronavirus", with the purpose of mobilizing and coordinating the activities of municipal public bodies and entities, for the adoption of measures to deal with the Public Health Emergency, among them, the creation of the CRSR⁷.

The implementation of the CRSR aimed to offer medical and nursing care to the population with mild to moderate respiratory symptoms that may be suggestive of COVID-19. CRSR aims to support the health care network and prevent overcrowding in Urgency and Emergency services, such as Emergency Care Units and Hospital Emergencies.

The multiprofessional team that works at CRSR is constantly trained and trained to identification of respiratory symptoms, handling of suspected cases, urgent and emergency situations, and necessary referrals, in addition to disinfecting the environment and surfaces. The training has



been carried out by nurses, using video recordings and / or in person, addressing: biosafety; use of Personal Protective Equipment (PPE); and simulation of the flow of care, taking into account the care recommended in relation to the minimum distance and strategies to reduce the risk of infection. The trainings are in loco, addressing topics such as Cardiopulmonary Resuscitation and Management in Early Orotracheal Intubation.

In the routine of health services, nurses are responsible for care and management functions, including health education, the management of human and material resources, in addition to good communication, promoting integrated management based on technical-scientific knowledge and a focus on the population. Studies point out the relevance of professional training to promote quality care. The nurse is essential in the nursing team, influences behaviors and attitudes and plays an indispensable role in ensuring health outcomes, due to their technical skills that encompass health management and planning⁸⁻¹⁰.

Implementation: structure, routine and biosafety

The 1,617 m² building was provided by the Municipal Social Assistance Secretariat. All rooms are spacious, airy, and bright, remaining open during the entire service period with windows and doors. In addition, the safety distance between people is guaranteed as established by Organs competent bodies¹¹.

The physical structure contains: 01 reception, 06 medical offices, 02 observation rooms (capacity of 10 beds and 10 armchairs), 01 medication preparation room, 01 critical / stabilization room, 01 administration room, 02 exclusive cups for employees, 01 warehouse, 01 break room and professional dressing room, 01 male bathroom and 01 female bathroom, both with showers for professionals, suitable place for disposal and collection of infectious waste.

The PPE is made available to all professionals and is located at different locations in the CRSR so that changes can be made when necessary. The guidelines to promote the proper use and correct attire / undressing of masks, caps, props, aprons, and glasses are carried out constantly.

The nurse must be attentive to his team, because, in addition to the adequate contingent of material and human resources, the provision of a rest room at work promotes a culture of safety and appreciation for professionals¹².

Regarding the flow of care, the patient is welcomed, still at the service door, by a properly trained nurse, who identifies the complaints to classify as respiratory symptomatic, provides 70% alcohol for hand hygiene and a surgical mask for the patient to be treated. forwarded to reception. Access to reception is limited to two patients at a time. At the reception, the professionally trained nursing technician performs the screening by filling out the registration form, checking vital signs (oximetry, heart rate and temperature) and collecting data. Subsequently, the patient is referred to the doctor's office.

In medical offices, precautions of contact and droplets are maintained. All patients who qualify as a

suspected case, according to the guidelines of the Ministry of Health, are immediately notified to the Municipal Epidemiological Surveillance, which proceeds to the investigation and collection of tests - as recommended in the management protocols of COVID-19.

The notification allows the diagnosis of the epidemiological condition of an injury, the investigation and monitoring of cases, culminating in measures to contain the diseases, in addition to subsidizing the planning of the actions to be performed⁸.

If the medical professional prescribes medication administration and / or control of vital signs, observation room 1 was created, consisting of armchairs. However, if the patient presents with respiratory distress, prescription of oxygen therapy (except nebulization) and the need for continuous monitoring by the health team, he is sent to the observation room 2, made up of stretchers. Both rooms are equipped with supplies and equipment to provide the necessary assistance.

In procedures that may generate aerosols, such as manual ventilation before intubation, intubation or tracheal aspiration and cardiopulmonary resuscitation, professionals were instructed and have materials available for aerosol precautions, as recommended by the National Health Surveillance Agency (ANVISA)¹¹, as clothing / overalls with weights over 40, N95 masks and face shield. In addition, these procedures are reserved for the Critical Room, which aims to stabilize critically ill / acute patients prior to transfer to the referral hospital.

The implementation of contact precautions and droplets - in addition to precautions for aerosols, when necessary - is the main measure to prevent transmission between patients and health professionals and, therefore, was adopted in all assistance at CRSR, to minimize exposure respiratory pathogens, including SARS-CoV-2¹⁰.

At the beginning of each shift, the nurse defines the "Rapid Response Team", responsible for acting in an emergency on that shift. It is important to note that it is not the objective of CRSR to care for critically ill patients, however, analyzing the rapid exacerbation of some symptoms in the reality of care for people with COVID-19 and thinking about their survival, this room was created. To this end, the coordination of the service obtained the loan of equipment from other institutions, such as electrocardiograph, cardiac monitor, mechanical ventilator, infusion pump, portable vacuum cleaner and emergency cart. The service also has a white ambulance, equipped with a trained driver for the removal and transportation of patients, when necessary.

The administration room is the place where the coordinating nurse of the CRSR and the nurses and medical supervisors on duty perform the management activities related to assistance, namely: control and closing of the time sheet, making scales of professionals, daily reports of care , control of the stock of inputs and maintenance requests, service to outsourced services, among others. At the end of each shift, all occurrences are described in the logbook to promote internal communication.

Due to the economic and social impacts of the



pandemic, the team has a social service professional, who identifies situations of vulnerability and makes the necessary referrals.

The technical team established a routine for cleaning the building and furniture in accordance with ANVISA standards¹¹, times for cleaning all environments, door handles every two hours, disinfecting tables, chairs and surfaces at every contact with the patient, disinfecting the floor and bathrooms 3 times a day, emptying trash bins every 3 hours, with alcohol 70% and hypochlorite 1%, in order to reduce the risk of contamination of professionals and patients. The hygiene team registers and signs in a specific form created by the service nurses.

Final Considerations

The construction and implementation of a multiprofessional service to face the current pandemic of

COVID-19 has nursing as the front line, under the leadership of the nurse, and this professional is responsible for the planning, organization, coordination, execution and evaluation of health care services. nursing. The study described the diversity of actions of the professional nurse in a public health service, from planning to safe and scientifically based implementation. At the end of this report, the role of the nurse is stated and the extent to which the Systematization of Nursing Care was fundamental in the entire process of implementing the CRSR.

Describing this process was intended to share experiences to face the pandemic experienced. The description of other coping strategies was not found in the literature, which, in turn, is a point to be rethought by all of us, professionals and researchers, who often do not publish our practical experiences, whether successful or not.

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