

Management of institutional processes in a secondary public hospital to combat the 2019 pandemic

Gestión de procesos institucionales en un hospital público secundario para combatir la pandemia de 2019

Gestão de processos institucionais em hospital público secundário para enfrentamento da pandemia de 2019

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Abstract

The aim was to analyze the management of institutional processes in a secondary public hospital during the COVID-19 pandemic. Documentary study, with a qualitative approach, in a secondary hospital, in the northern region of Paraná, a reference for COVID-19 care by the Unified Health System in the period 2020 and 2021. The documents were dated from April to September 2020 and focused on the Care Management and Institutional Process Management, in the face of the COVID-19 pandemic. In the first category, the creation of a "respiratory ward" to care for suspected or confirmed patients stood out. Measures were adopted to standardize assistance and medicines, aiming to prevent virus transmission. In the second category, there were guidelines on the appropriate use of Personal Protective Equipment by professionals, changes in the x-ray process, epidemiological monitoring, and reorganization of the flow of elective surgeries, with mandatory tests for COVID-19. The organizational changes necessary during the first two years of the pandemic in a secondary hospital for COVID-19 care became noticeable, with the importance of carrying out urgent measures to reorganize hospital services. Therefore, the studied hospital's physical, administrative, and support structure was readjusted to the new reality.

Descriptors: Nursing; COVID-19; Hospital Administration; Health Management; Change Management.

Resumen

El objetivo fue analizar la gestión de procesos institucionales en un hospital público secundario durante la pandemia de COVID-19. Estudio documental, con enfoque cualitativo, en un hospital secundario, de la región norte de Paraná, referencia para la atención de la COVID-19 por el Sistema Único de Salud en el período 2020 y 2021. Los documentos fueron fechados de abril a septiembre de 2020, enfocados sobre la Gestión del Cuidado y Gestión de Procesos Institucionales, ante la pandemia de COVID-19. En la primera categoría destacó la creación de una "sala respiratoria" para atender a pacientes sospechosos o confirmados. Se adoptaron medidas para estandarizar la asistencia y los medicamentos, con el objetivo de prevenir la transmisión del virus. En la segunda categoría, hubo lineamientos sobre el uso adecuado de Equipos de Protección Personal por parte de los profesionales, cambios en el proceso radiológico, seguimiento epidemiológico y reorganización del flujo de cirugías electivas, con pruebas obligatorias para COVID-19. Se hicieron evidentes los cambios organizacionales necesarios durante los primeros dos años de la pandemia en un hospital secundario para atención de COVID-19, siendo importante llevar a cabo medidas urgentes para reorganizar los servicios hospitalarios. Por lo tanto, la estructura física, administrativa y de apoyo del hospital estudiado se reajustó a la nueva realidad.

Descriptores: Enfermería; COVID-19; Administración Hospitalaria; Gestión en Salud; Gestión del Cambio.

Resumo

Objetivou-se analisar a gestão de processos institucionais em um hospital público secundário durante a pandemia de COVID-19. Estudo documental, de abordagem qualitativa, em um hospital secundário, da região norte do Paraná, referência para atendimentos de COVID-19 pelo Sistema Único de Saúde no período de 2020 e 2021. Os documentos eram datados de abril a setembro de 2020, enfocaram a Gestão do Cuidado e Gestão de Processos Institucionais, frente à pandemia de COVID-19. Na primeira categoria, destacou-se a criação de uma "ala respiratória" para atender pacientes suspeitos ou confirmados. Foram adotadas medidas de padronização da assistência e medicamentos, visando evitar a transmissão do vírus. Na segunda categoria, houve orientações sobre o uso adequado de Equipamentos de Proteção Individual pelos profissionais, mudanças no processo de radiografias, monitoramento epidemiológico, e reorganização do fluxo de cirurgias eletivas, com testes obrigatórios para COVID-19. Tornou-se perceptível as mudanças organizacionais necessárias durante os dois primeiros anos da pandemia em um hospital secundário referente para atendimento à COVID-19, havendo a importância de realizar medidas urgentes para a reorganização dos serviços hospitalares. Portanto, a estrutura física, administrativa e de apoio do hospital estudado foi readequada para a nova realidade.

Descritores: Enfermagem; COVID-19; Administração Hospitalar; Gestão em Saúde; Gestão de Mudança.



Introduction

The end of 2019 gained notoriety and media repercussions around the world due to news coming from China about a viral respiratory disease, contagious and previously unknown to the scientific community called Coronavirus Disease 2019 (COVID-19)¹.

In Brazil, the first record of a suspected case of COVID-19 occurred on January 26, 2020². Concomitantly, with the emergence of suspected and/or confirmed cases of the disease, health institutions needed to modify their configuration and flow of care to deal with the new reality in a safe and effective way^{3,4}.

In the context of the State of Paraná, measures to combat the pandemic began in February 2020, when SESA-PR Resolution No. 126/2020 launched the Emergency Operations Center (COE). The objective of this resolution was to define strategies and procedures at the state level to face the current epidemiological situation of COVID-19. Since February 2020, the Paraná State Health Department (SESA) has implemented permanent strategies to reorganize hospital care services. Hospital structures that were under construction or renovation before the pandemic became the focus of efforts by state and national leaders to use them as reference units for regional care^{5,6}.

Given this scenario, organizational changes were imperative to guarantee the continuity of institutional processes. Institutional processes are understood as all dynamism and innovations in search of better planning and, consequently, better results⁷. Concerning the COVID-19 pandemic, change management has gained relevance, being described as "any change, planned or unplanned, in the relationship between the company and the environment, which can have consequences on its effectiveness and efficiency"⁸. Thus, change management presents structured processes to help managers face adversities, such as having control of the scenario in an agile way⁷, a fact that has become crucial in the scenario of the COVID-19 pandemic.

Nesse sentido, esta pesquisa teve como objetivo analisar a gestão de processos institucionais em um hospital público secundário para o enfrentamento da COVID-19.

Methodology

This is a retrospective documentary study, with a qualitative approach. Documentary research is a methodological procedure that uses strategies in the perception and analysis of documents⁹.

The study was carried out in a secondary hospital, in the northern region of Paraná, a reference for COVID-19 care. This health institution exclusively served adult patients admitted through the Unified Health System (SUS).

Inclusion criteria: documents referring to the years 2020 and 2021 were analyzed, as these were the initial years of the pandemic and comprised the largest number of cases of hospitalization and death related to COVID-19. As an exclusion criterion, there were duplicate documents and those that were not institutional.

Data collection was carried out in 2021, therefore, the research consisted of thirty internal communications (IC) and a contingency plan developed by the institution and

approved by the State Department of Health. To analyze the data contained in the aforementioned documents, authorization was obtained from the board of directors of the study hospital. The documents were provided by nurses from the Hospital Infection Commission (CCIH) responsible for preparing the documents used for this research.

To carry out the document analysis, four steps were followed: exploratory reading, selective reading, analytical reading, and interpretative reading. Exploratory reading provides an overview of the material to extract data of interest for research. Selective reading selects content that responds to the objectives of the study. Analytical reading is the systematization of all content-seeking answers to the objectives. Finally, interpretative reading seeks to give meaning to the results found under the research objectives¹⁰.

All ethical and legal principles proposed in Resolution No. 466/12 of the National Health Council were respected, maintaining the confidentiality of the data contained in the documents as well as their authors, dispensing with the use of the Free and Informed Consent Form, according to CAEE 57460022.0.0000.5231 and Opinion number 5.436.142, approved by the Research Ethics Committee of the State University of Londrina.

Results

All documents researched were prepared in 2020 and were applied and in force for the year 2021. The documents were dated from April to September 2020. The results were analyzed in two categories called Care Management and Institutional Process Management.

Care management

The first category of this study, Care Management, comprised information related to institutional changes regarding the care provided to patients suspected or confirmed for COVID-19. Among the aspects, the following were listed: 1. Guidelines linked to the flow of care for patients in the hospital, 2. Reorganization of the emergency room to care for patients with Flu Syndrome or Severe Acute Respiratory Syndrome and 3. Information regarding the standardization of care and medicines.

The flow of patient care was based on organizing a specific ward or sector that could accommodate suspected or confirmed COVID-19 patients. According to the documents, this location was called 'respiratory ward', which consisted of a ward located between the emergency room and the emergency room, considered, at that time, the most appropriate place to meet this new demand for patients. As criteria to differentiate suspected and confirmed COVID-19 patients from those who were not affected by the disease, it was determined that everyone who presented any respiratory symptom classified as Flu Syndrome or Severe Acute Respiratory Syndrome would be treated in a separate room in the classification of emergency room risk and would be directly allocated to the respiratory ward.

In relation to the standardization of care, the documents addressed that the institution analyzed, in line with the hospital's CCIH, prohibited inhalation and



nebulization practices as well as the clamping of chest drains in patients suspected or confirmed for COVID-19, with the aim of prevent the extravasation of aerosols. These guidelines occurred due to the disease's mode of transmissibility and to reduce contamination within health institutions. Medication standardization took place at the entrance to the emergency room, where all patients classified as having Flu Syndrome or Severe Acute Respiratory Syndrome received medication standardization in the institution's medical prescription and, according to the severity of the case, were transferred to tertiary hospitals. of the city, responsible for treating serious cases.

Management of institutional processes

The second category addressed in this study was Institutional Process Management, which addressed internal routine changes for the institution's workers, such as 1. Use of personal protective equipment (PPE); 2. Carrying out x-ray examinations (RX); 3. Notification and monitoring of COVID-19 and 4. Reorganization of the flow of elective surgeries.

Regarding PPE, new recommendations were determined for appropriate use in caring for suspected or confirmed COVID-19 patients, such as the use of fabric and disposable aprons, hats, N95 masks, gloves, and protective glasses. In addition, employees began to use surgical masks in all facilities of the health institution, thus increasing the consumption of this PPE. Another point addressed was changes in the work process of the radiology team. Readjustments were necessary to take X-rays for patients in the respiratory care ward. These changes consisted of examining at the bedside and no longer in the X-ray room.

The epidemiological monitoring of suspected cases of COVID-19 within the institution was also addressed in the documents regarding guidelines on the mandatory completion of notification forms as well as the forms of isolation of patients, whether in isolated rooms or a cohort.

Finally, the adjustments regarding the care that surgical patients should receive before being sent to the operating room was also an item addressed in this category. The institution underwent approximately 24 months of suspension of elective surgeries. With the return of this activity, rapid testing for COVID-19 was carried out before patients were taken to the surgical center. Another change referred to the sanitary conditions in the institution's Surgical Center, which required reducing the number of employees circulating in the operating room, as well as reducing the number of surgeons working and consequently the number of elective surgeries.

Discussion

The results of this research showed that, due to the pandemic, the effort to implement safety and support measures for employees, patients, and families allowed changes in the structure and work processes¹¹.

The fight against COVID-19 required the urgent reconstruction of hospital facilities in a short period. The appointment of new emergency plans and measures based on literature, as well as the updating of national and international information and protocols, required the

redesign and adequacy of the rules under the guidelines received from health institutions¹².

The hospital's experience matched the task of other major hospitals in the country. Because the coronavirus was highly contagious, some hospitals first had to reorganize and structure a ward to separate patients with suspected or confirmed viruses from those without, or even create field hospitals for overcrowded wards¹³. At the beginning of 2020, an entire part of the studied hospital was closed and isolated, prioritizing the care of patients with COVID-19.

The adaptation of the physical structure allowed care for patients with COVID-19 to take place more safely. Isolations also ensured the safety of other patients and healthcare professionals, as the virus was prevented from spreading to other parts of the hospital. Due to the rapid spread of the virus, there was a need to adopt standardized medication and care measures to meet patient demand. According to the Ministry of Health, it has become essential to standardize flows for assistance to patients suspected or confirmed with COVID-19^{14,15}.

It is noteworthy, therefore, that the need for well-structured routines and protocols for patient safety in the hospital environment based on scientific evidence helped to standardize care and, consequently, guided professionals to work in an agile manner with the guarantee of greater safety for themselves and patients¹⁶.

Another highlight was the increase in PPE consumption during the pandemic, which caused constant concern among healthcare teams, as well as managers and the community due to the lack of this input in hospitals and its potential rationalization. It is important to ensure the protection of health workers against the virus so that they do not act as carriers of the infection and prevent them from becoming ill, thus maintaining care for the population^{17,18}.

A regional, medium-sized hospital, located in the State of Rio Grande do Sul, promoted health education as a great ally to improve working conditions during this period, recognizing the risks caused by COVID-19 and providing adherence to safe behaviors. Health education was also key to the institution of this study, and all employees were trained in the correct and safe use of PPE and the correct disposal of clothing in each sector of activity¹⁵.

Brazil and the world faced serious problems caused by the COVID-19 pandemic. The challenges faced by other countries were announced by the media and social networks since the beginning of their emergence and allowed Brazilian health institutions to adequately prepare their training as well as adapt the physical structures of the institution prior to the arrival of the virus in Brazil. It was also possible to train professionals to deal directly with these patients¹⁹.

However, other studies carried out in Brazilian health institutions explained that some professionals reported that health units neglected them regarding the availability of personal protective equipment (PPE) and adequate supplies for patient care. The lack of beds, medicines and ventilators was a reality in some hospitals before the pandemic, which intensified even further with its spread²⁰. It is noted that there were no quality resources due to high market demand in line with the rapid spread of the



virus¹⁹. Given this, leaders needed to participate directly in the process of organizing care, education, and training of health workers, defining policies that met the public health and protection needs of the community of workers^{21,22}.

The guidelines established for the Diagnostic Imaging Center also changed the pandemic. A large healthcare institution in the city of São Paulo, for example, speeded up X-ray exams for patients by adopting a portable bedside X-ray²³. This experience is like what happened in this institution where the x-ray exam was carried out at the bedside and no longer in a specific room to avoid the spread of the virus. Another challenging task was the epidemiological control of cases of infection by this disease and the resulting mortality. Detection and notification of cases became important in the country, as these records served as indicators of transmission rates. Reports of deaths due to complications related to COVID-19 and its impact on the population were essential for epidemiological monitoring in all regions of the country²⁴.

Therefore, cooperation between the nursing team and clinical analysis laboratories was essential regarding the distribution of diagnostic kits for COVID-19. The lack of these resources and materials could directly interfere with the dynamics of disease transmission and the positive interpretation in suspected cases²⁵.

The highly contagious nature of the virus also represents a challenge in surgical centers, resulting in the need for changes within surgical departments and changes to the surgical planning routines in which they were impacted, thus changing queues and service priorities, placing greater emphasis on emergency surgeries²⁶.

Because of this, the importance of engaging all health workers in an interdisciplinary way in exchanging experiences and knowledge to face reality was verified. Structural changes, modification of care flows, development of clinical protocols, and training of staff

collaborators from the multidisciplinary team were essential for the study institution during the fight against the pandemic¹⁵⁻²⁷.

Conclusion

These results demonstrated the necessary organizational changes during the first two years of the pandemic in a secondary hospital for COVID-19 care. The guidelines cited in all documents from the study institution sought to support and unify care adjustments for cases of suspected or confirmed COVID-19 patients, as well as their companions and employees located at the institution, establishing institutional and patient care flows.

Due to the high demand of patients, it was necessary to take urgent measures to reorganize hospital services into management and care bodies in a short period. Processes and care flows were reviewed, rebuilt, and reorganized to care for suspected or confirmed COVID-19 patients. The physical, administrative, and support structure of the hospital studied was readjusted to the new reality.

Due to the high demand of patients, it was necessary to take urgent measures to reorganize hospital services into management and care bodies in a short period. Processes and care flows were reviewed, rebuilt, and reorganized to care for suspected patients or confirmed with COVID-19. The physical, administrative, and support structure of the hospital studied was readjusted to the new reality. This research sought to contribute to learning regarding organizational changes in health institutions in the face of the COVID-19 pandemic. The analysis of this service restructuring process in times of crisis made it possible to identify management tools and work processes that need to be maintained or adapted. Thus, health services can be based on the reality presented in this study, regarding the review and readaptation of work and care processes in pandemics of magnitudes such as COVID-19.

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