

## LETTER TO THE EDITOR

#### **Reorganization and expansion of services at the Camaguey Pediatric Hospital during COVID-19**

Reorganización y expansión de los servicios en el Hospital Pediátrico de Camagüey durante la COVID-19

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#### **Dear Editor:**

The SARS-CoV-2 coronavirus, identified just over three years ago, causes the disease known as COVID-19.<sup>(1,2)</sup> This condition was unknown before the outbreak was reported in Wuhan, China, in December 2019, which became a pandemic.<sup>(3)</sup>

From the first moment the World Health Organization (WHO) observed the exponential increase in cases, it recommended that countries reorganize and expand hospital services to cope with the complex situation. This task was given to the health managers within their radius of action, which constituted a challenge.<sup>(4)</sup>

The reorganization and expansion of the capacity of hospital services implied the development and implementation of strategies to effectively care for, treat and manage the high volume of patients affected by COVID-19. In this regard, the necessary functions were assigned and compliance was ensured.<sup>(5)</sup>

Leadership was one of the main coping functions, as a fundamental role in the activation of the hospital's emergency response mechanism, through the hospital incident management system, as well as other mechanisms adopted on the basis of preparedness, experience and regulatory aspects.



The hospital incident management system enabled the institution's management to make informed decisions and determine a single line of command and authority, through the definition of clear objectives for response at all levels of the organization (strategic, management and tactical-operational), with benefits for both institutional and inter-institutional coordination.

# The reorganization and expansion of services at the Pediatric Hospital of Camagüey was carried out through 4 fundamental axes:

#### 1. Categorization and flow of patients.

It included the categorization and flow of patients within the hospital for epidemiological surveillance. All of them were referred or seen at the Respiratory Department of the institution. At the time of admission, they were classified as surveillance, suspected or confirmed cases. In the first case, there was a history of contact with a positive case; in the second case, in addition to being a contact, symptoms of COVID-19 were identified, while in the third case, the result of the Polymerase Chain Reaction (PCR) was positive.

As the epidemiological situation became more complex, the action protocols underwent variations with the aim of further individualizing the risk in order to maintain the provision of services. In this sense, the flow of patients was not only directed to the Pediatric Hospital, although it is worth mentioning that most of them received care at the aforementioned institution, including all children under one year of age and patients with comorbidities.

Contacts and suspects were hospitalized in the "Fajardo Infectious" ward. For positive patients, the Mariana A and Mariana B wards were set up. This strategy was successful as it allowed for an adequate organization of the services, as well as allowing for the decantation of the positives to prevent the infection of contacts and suspects who were negative.

#### 2. Expansion and conversion of beds

In the year 2021, during the exponential increase in the number of cases, there was a need to expand hospitalization services, since the number of hospital beds allocated for this purpose was not sufficient. In response to this situation, the "Party School" and "Villa Sugar" were set up as hospital facilities, which operated with medical personnel from the provincial institution.

Two beds were made available in the Intensive Care Unit (Septic 1 and Septic 2 cubicles), taking into account that a higher incidence meant a possible increase in the number of serious cases. In the Intermediate Care Unit, 5 beds were enabled with independent exit and other conditions required for the care of less serious patients. In the Neonatology Service there was a Septic Cubicle, where exceptional cases were treated, since most of the care for this age group was provided at the Centenary Hospital and the Cardio Center.

#### 3. Availability of equipment and other hospital units

The necessary resources for excellent care were available at all times, such as personal protective equipment, diagnostic equipment and other medical supplies. There was a sufficient number of pulmonary ventilators, oxygen cylinders and oxygen administration outlets. The stability of these was determined by administrative management.

At the beginning, pediatric patients were treated at the Military Hospital of Camagüey under the guidance of the country's top management. Later on, services were centralized at the Pediatric Hospital. In view of the alarming increase in the number of infections, other hospital units became necessary, including the Florida Pediatric Hospital.

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#### 4. Centralization of bed management

A Command Post was created which operated 24 hours a day, with the aim of having an adequate control of the availability of cribs and beds, where statistics and epidemiology together updated in real time the staffing available in the Hospital and in the dependencies (Villa Sugar and Party School).

#### Results of the process of reorganization and expansion of hospital services

The strategy of reorganization and expansion of hospital services facilitated quality care, which prevented an increase in the number of serious cases and deaths. Adequate case management prevented the occurrence of hospital outbreaks, as well as favored the continuity of the care process for other acute diseases and follow-up of chronic diseases through outpatient visits, which included patients from the provinces of Ciego de Avila and Las Tunas.

Of a total of 18664 patients attended, 8451 were positive and 10213 negative. Only one patient with a history of obesity and microcephaly died. A considerable number of adults (companions) also received timely diagnosis and medical care.

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