WORKING IN PANDEMIC MODE BY COVID-19 IN NATIONAL
CENTER FOR CHILDREN'S REHABILITATION OF CORPORATE FUND
«UNIVERSITY MEDICAL CENTER»

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National Center for Children's Rehabilitation has been functioning since September 10, 2007.
Children with psycho-neurological pathology are admitted from 1 to 18 years of age from all regions of Kazakhstan for complex rehabilitation. The capacity of the Center is 300 beds.









A disease caused by a new coronavirus, detected in December 2019, has already made history as a pandemic, an emergency of international importance. The studies show that as for January 25, 2020, almost 76 000 people were infected in Wuhan only. Due to extensive traveling within and outside of China, the spread of infection was very high. The researchers calculated the basic reproductive number of the epidemic was 2.68 and determined that the infection is doubling every 6.4 days. The most common clinical syndrome of the new infection is pneumonia and respiratory distress syndrome

To prevent the spread of the disease, a state of emergency was declared in the country from March 16 to May 11, 2020

No entertainment, sports and other public events, as well as family and memorial events are allowed the activities of large non-food retail facilities, cinemas and other places with mass gatherings of people were stopped

restrictions were placed on entry and exit from the country

Objective. Proper organization of the work process and following the rules of preventing the spread of coronavirus infection in the National Center for Children's Rehabilitation during the pandemic

A thermal imaging camera was installed at the entrance to the Center to measure body temperature; if the body temperature was above 37 degrees, the employee was suspended from work and was sent to the outpatient clinic at the place of residence

The Center was zoned into "dirty" and "clean" zones. The dirty zone is the entrance group, the emergency room, the reception, and the lobby divided by couches. The clean zone - all the other rooms

Outings of children were held in the territory assigned to each ward, at certain hours. Visits and contact with relatives were excluded

Receiving transmissions by time

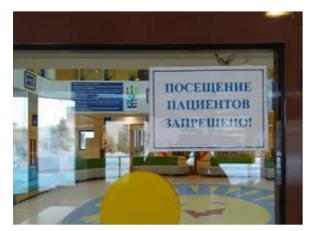
General concert events and meetings excluded



On the days of checkin, patients were admitted in type I anti-plague suits

The employee entrance has been separated to avoid crossing streams





There is a strict ban on visits to patients.
Outpatient appointments have been cancelled



Cleaning door handles every hour, regular ventilation of the room

Infection control staff conducted briefings on proper use of protective equipment, hand sanitation, and social distance





Medical observation was carried out by measuring the body temperature of staff and patients twice a day, for epidemiological reasons samples were taken by PCR method.

## March, 2020

On the border of several regions of Kazakhstan, around a number of large settlements were placed day and night sanitary posts, so patients who were admitted in May, we could not discharge, and the management of the Center appealed to the Ministry of Health to conduct two courses of rehabilitation for these same patients

On the next visit, the number of patients was halved due to the prohibition of entry/exit from the city, in connection with this we received patients from Astana

July, 2020

A hospitalization of patients was suspended and the Center operated at 50% occupancy rate for the next two visits. No cases of COVID-19 patients were registered in 2020.

The Center has 488 employees, of whom 28 employees fell ill with COVID-19 in 2020, including: 25 cases of COVID-19 "+" and 3 cases of pneumonia

20% of employees were sent to downtime

10% of the administrative staff was transferred to a remote working method

Часть персонала использовали трудовой отпуск

Infection control staff made a list of close contacts who were in isolation for 14 days

The second wave had no impact on the Center's activities, and it continued to operate normally. In 2021, 17 cases of COVID-19 were registered. (data as of 14.07.2021). There were no fatal cases.



A Standard Operating Procedure (SOP) dated August 25, 2020, was developed in the «UMC» corporate Fund. "Order and algorithms of actions in conditions of emergency in the Republic of Kazakhstan" during the quarantine and state of emergency in the territory of Astana to prevent the spread of coronavirus infection (COVID-19). On January 8, 2021, this SOP was revised and approved by Order of the Director of the Center, which prescribes the following activities:

- ► On arrival days, admit patients in protective equipment of level 1, keeping a minimum 1 meter distance.
- On arrival days, organize an additional staff entrance with deployment of a body temperature filter (1 block, service entrance).
- ► Children from Astana are to be admitted only if the child and person in care are tested negative for Covid-19 by polymerase chain reaction (PCR) at least 7 days before admission.
- For children admitted to hospital without a person in care, the history and additional relevant information should be collected remotely (telephone, video link).
- Classes should be conducted individually in personal protective equipment. The cancellation of group classes, sections, concerts (from March 2020) shall remain in force.
- ► Every patient with signs of respiratory infection and pneumonia, as well as patients with clinical signs that do not exclude COVID-19, be considered as potentially infected (source of infection) with COVID-19 and not be hospitalized..
- Strengthen the control of mask requirement in all structural units of the Center.
- Observe the rules for replacing masks every 3 hours, disposable gloves at the rate of replacement after each patient, antiseptics, disinfectants.
- Continue regular ventilation of all rooms.



To date, the Center is doing a lot of work on vaccinating employees. Specialists are invited from polyclinics to carry out vaccinations. The first component vaccinated -399 employees, which is 82%, employees with medical excuse - 41, unvaccinated employees - 49



So, the National Center for Children's Rehabilitation has also been affected by the pandemic, the staff has fallen ill, the work schedule has changed, there have been downtime, in 2020 early discharge of patients was 6.2% (with the threshold value of 1%), 180 patients were discharged before the due date, which affected the bed capacity utilization - 71.3%, with the due 100%.

Due to the strengthened measures of prevention and control of sanitary and disinfection regime, from March 2020 to July 2021 no cases of coronavirus infection among patients and their parents were registered in the Center.

