



Organization of Medical and Sanitary Care for COVID-19 Coronavirus Infection in Uzbekistan

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Author's Contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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Short Communication

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ABSTRACT

For many centuries, humanity has been facing the global spread of dangerous infections. Today, a new coronavirus SARS-CoV-2 has entered the list of pathogens with pandemic potential. The virus quickly began to take over new territories. Already in February 2020, the COVID-19 outbreak acquired the status of a pandemic. To date, there is no country where at least one case of COVID-19 has not been recorded. The article presents the epidemiological situation in the world and in the Republic of Uzbekistan, as well as the procedure for organizing health care to the population during the COVID-19 pandemic.

Keywords: COVID-19; pandemic; antiepidemic measures; prevention.

1. INTRODUCTION

Throughout the history of mankind, infectious diseases have been its constant companion. Even in our time, outbreaks of diseases occur almost constantly.

The terrible "Spanish flu", Which claimed, according to various sources, from 50 to 100 million human lives, is more than a hundred years old. This is the first flu pandemic that become now all over the world, thanks to its wide reflection in testimonies descriptions, it is far from the first pandemic in the history of mankind [1]. It

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is believed that Hippocrates first described the flu in 412 BC in his work". In general, the epidemic flu has been known to mankind for a long time, in the chronicles of the second millennium there is a description of a sudden mass illness of people under the names "Italian disease", "general cough", "comatose fever", "Russian disease", "Chinese", "influenza", "Spanish". There is evidence that, since the XII century, humanity has been attacked by more than 130 epidemics and pandemics of influenza. Throughout the XVII and XVIII centuries, a series of "Great Epidemics" regularly devastated cities throughout Europe [2,3].

The turn of 2019-2021 has gone down in history as a pandemic of the new coronavirus infection COVID-19, as an emergency situation that poses a threat to national and international security.

In late 2019, a novel coronavirus, now designated SARS-CoV-2, was identified as the cause of an outbreak of acute respiratory illness in Wuhan, a city in the Hubei province of China. In February 2020, the World Health Organization (WHO) designated the disease COVID-19, which stands for coronavirus disease 2019. The clinical presentation of 2019-nCoV infection ranges from asymptomatic to very severe pneumonia with acute respiratory distress syndrome, septic shock and multi-organ failure, which may result in death [2]. On January 30, 2020, the WHO declared the COVID-19 outbreak a public health emergency of international concern and, in March 2020, began to characterize it as a pandemic in order to emphasize the gravity of the situation and urge all countries to take action in detecting infection and preventing spread [4].

The virus that causes COVID-19 is thought to spread mainly from person to person, mainly through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

Coronavirus infection is an acute viral disease with predominant respiratory damage caused by SARS-CoV-2, an RNA genomic virus of the genus Betacoronavirus of the family Coronaviridae. This infection will certainly take a special place in the group of SARS, due to the pathogenic properties of the virus. The pathogen belongs to the 2nd group of pathogenicity [3].

The SARS-CoV-2 coronavirus is presumably a recombinant virus between a bat coronavirus and an unknown coronavirus of unknown origin. The genetic sequence of SARS-CoV-2 is similar to the sequence of SARS-CoV by at least 79% [5].

The main source of infection is an infected person, including those at the end of the incubation period. Virus isolation from the patient can begin 48 hours before the onset of symptoms of the disease and, as much as possible, in the first 1-3 days from the onset of the disease, lasts up to 12 days in mild/moderate cases and for > 2 weeks in severe cases. The risk of infection in contact with a patient (clinically pronounced disease) is 1-5% in close contacts, transmission in most cases is carried out in family clusters (in 75-85% of cases) [5].

The study of viruses that caused pandemics made it possible to learn the mechanisms of action and the main target organs of infection, which played a major role in the organization of medical and preventive care to the population.

In Uzbekistan, laboratory diagnostics of COVID-19 is carried out by PCR and ELISA in accordance with the instructional and methodological documents of the Uzkomnazorat [6]. In Uzbekistan, laboratory diagnostics of COVID-19 is carried out by PCR and ELISA in accordance with the instructional and methodological documents of the Uzkomnazorat, the main type of biomaterial for laboratory research are smears from the nasopharynx and / or oropharynx. The research is carried out by laboratories of medical organizations, regardless of the form of ownership, having a sanitary and epidemiological conclusion on the possibility of working with pathogens of human infectious diseases 111-1U pathogenicity and working conditions (by PCR or other methods).

In case of receiving a positive or doubtful result on COVID-19, the head of the laboratory is obliged to immediately inform the territorial body of the Uzcomnazorate and within 2 hours transfer the biomaterial with a positive (doubtful) result to the Republican Specialized Scientific and Practical Medical Center for Epidemiology, Microbiology, Infectious and Parasitic Diseases.

Currently, there is no specific antiviral drug recommended for the treatment of COVID-19. Although there are cures for illnesses and

developments made by leaps and bounds in our day, the strongest and most effective weapon that society has against this virus that is affecting not just health but also economics, politics, and social order, is the prevention of its spread. The interim guidance published by the WHO on 7 March 2020, "Responding to community spread of COVID-19," states that preventing COVID-19 from spreading is through the development of coordination mechanisms not just in health but in areas such as transportation, travel, commerce, finance, security and other sectors which encompasses the entirety of society [7].

The main direction of preventing the spread of a dangerous infectious disease and protecting the population is the organization and implementation of measures for the sanitary protection of the country's territory. The national plan to prevent the importation and spread of a new coronavirus infection in the territory of the Republic of Uzbekistan includes monitoring of the epidemic situation in the country and in the world.

As of 23.01.2022, more than 350 million confirmed cases of COVID-19 were registered in the world, more than 5.6 million people died. The most difficult situation is observed in the United States of America, India, Great Britain, France, Italy. More than 200 thousand infected with the new coronavirus have been registered in Uzbekistan, more than 3.2 million laboratory tests have been conducted [8].

Unprecedented quarantine measures are being taken: enhanced double control at checkpoints across the State Border and border closures; isolation of patients and suspected of the disease, all citizens at risk of severe infection; cancellation of mass events. Algorithms for laboratory diagnostics of coronavirus infection have been developed and applied.

Much attention is paid to sanitary and educational work with the population. To this end, the population is constantly informed on-line in the media, on the Internet about the risks of infection and about preventive measures in order to slow down the spread of infection, hotlines of the Ministry of Health of the Republic of Uzbekistan, Uzkomnazorat are organized.

A very important section of the training of healthcare professionals is to work out the algorithm of actions of medical workers in

providing care to a patient with suspected COVID-19, including compliance with the rules of infectious safety and measures to prevent the spread of infection in the hospital. The competence of medical workers in the epidemiology and prevention of COVID-19, the skills of using personal protective equipment depends on how effective the infection control measures will be.

Measures affecting the mechanism of transmission of the causative agent of infection:

- compliance with the rules of personal hygiene (wash your hands with soap, use disposable wipes when sneezing and coughing, touch your face only with clean wipes or washed hands);
- use of disposable medical masks, which must be replaced every 2 hours;
- use of personal protective equipment (PPE) for health workers;
- carrying out disinfection measures;
- disposal of medical waste of class B;
- movement of patients by special transport.

Procedure for the actions of a medical worker in case of identification of a patient with suspected COVID-19:

- identification of the patient based on the characteristic clinical picture of the disease and epidemiological history;
- temporary isolation of the patient (in a room at home, in a hospital ward, a polyclinic office);
- be sure to put a mask on the patient;
- transmission of information according to the notification scheme;
- providing the patient with the necessary medical care (to assess the severity of the course, indications for hospitalization);
- calling a team to evacuate a patient to an infectious hospital;
- identification, registration of persons who have been in contact with the patient (determination of isolation mode);
- medical supervision for 14 days for persons, including medical personnel at risk of infection [9]
- **Cleaning and disinfection**

High-touch areas such as bedside tables and door handles should be disinfected daily with regular household disinfectant containing a diluted bleach solution (that is, 1-part bleach to

99 parts water). For surfaces that cannot be cleaned with bleach, 70% ethanol can be used. Toilets and bathrooms should be cleaned and disinfected with a diluted bleach solution (one part bleach to 9 parts water to make a 0.5% sodium hypochlorite solution). Disposable gloves should be used when cleaning or handling surfaces, clothing, or linen soiled with body fluids. All used disposable contaminated items should be placed in a lined container before disposing of them with other household waste. Clothes, bed linens, and bath and hand towels should be cleaned using regular laundry soap and water or machine washed at 60–90°C with common laundry detergent. Disposable gloves should be used when cleaning or handling surfaces, clothing, or linen soiled with body fluids. All used disposable contaminated items should be placed in a lined container before disposing of them with other household waste [7,10].

2. CONCLUSIONS

An unprecedented "war" has been declared against humanity. We still have to study in detail the features of the COVID-19 pandemic and learn lessons. One thing is clear, when faced with an unknown virus, the main thing for humanity is to unite its efforts in the fight against this invisible enemy. That is why the constant exchange of information and the joint work of doctors from all countries is so important now. The COVID-19 pandemic requires the adoption of decisive, coordinated, global quarantine measures, ensuring biological protection of the population, cooperation in the development of treatment methods, in the creation of a vaccine, in the fight against panic and the spread of false information.

With COVID-19, which has no approved treatment, it is very important to prevent the spread in society. The main points in preventing the spread in society are hand hygiene, social distancing and quarantine. By expanding testing capabilities, identifying more positive patients in the community will also reduce the number of secondary cases with stricter quarantine rules.

Humanity has been tested for strength by various viruses and bacteria more than a dozen times, and we have successfully coped with even the most terrible of their representatives.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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