

# Prevention and Control Practice of COVID-19 Infection in Maternal and Child Health Institutions and Suggestions on Prevention and Control of Pregnant Women

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**Abstract:** Objective To explore the precise working mode of infection prevention and control in COVID-19, to provide scientific basis for the effective prevention of infection. Methods Based on the COVID-19 infection prevention and control response mechanism established by the state, combined with COVID-19 diagnosis and treatment, prevention and control plan and technical guidelines, innovative practice new working mechanism, and summarize the systematic infection prevention and control mode in the case of the epidemic. Results The prevention and control of COVID-19 infection should set up the goal of “zero nosocomial infection” and form the linkage of all staff. On this basis, the core of the work should be to improve the organization, establish the emergency work system, innovate the working mechanism, standardize the information management, and ensure the effective implementation of prevention and control measures through training and assessment, supervision and implementation, inspection and guidance and other measures. Conclusion Infection prevention and control is of great significance to the local epidemic disposal of COVID-19. Medical institutions need to establish a scientific and effective working mode, achieve the purpose of scientific, effective and accurate prevention and control, and better avoid the occurrence of infection events in the disposal of the epidemic.

## 1. Introduction

Infection management and prevention and control are the key content of medical quality and safety. On the one hand, it provides the basic guarantee for life and health safety for medical staff and patients. On the other hand, it is also one of the standards for evaluating the comprehensive quality management level of modern hospitals<sup>[1]</sup>. As of 8 October 2021, there were 2,37175,517 confirmed cases of COVID-19,19 (COVID-19; 19,19), 4,4838,475 deaths, and 1,8029,863 confirmed cases<sup>[2]</sup>. On October 18,2021, a new round of COVID-19 in Gansu province began to show a local epidemic. From the first positive nucleic acid test to the total confirmed cases in Japan, a total of 144 confirmed cases (including 83 in Lanzhou) and 2 asymptomatic infections (all in Lanzhou).As the reserve designated hospital for the treatment of women and children in our province, our hospital responded quickly, followed the arrangement and health committee, national prevention and treatment, prevention and control plan and guidelines, etc. Meanwhile, we also did a series of innovative work, and the author discussed the infection effectively and accurately.

## 2. Improve the Infection Organization Organization

On the basis of the original COVID-19 prevention and control leading group, medical care, sensory control and other functional departments, our hospital has made an emergency increase Set up “Joint Sense Control Working Group” to supplement the medical staff with public health background to the group, with infection experts and full-time personnel as consultants and technical guidance. After strict training and assessment, a group of 2 persons carry out the “no dead corner” inspection of the hospital, give site feedback on the problems and immediately; Besides, according

to the Notice on Further Improving the Working Mechanism of Infection Prevention and Control in Medical Institutions<sup>[3]</sup>And reference to the epidemic prevention and control experience in Guangdong province, hospital in clinical and each business department to form a “COVID-19 inductive control supervisor” team, members are composed of the head nurse, ensure the epidemic screening, hospitalization management and other risk control measures to the ground, bottom-up again grid regulatory system, in case of problems timely report to solve, prevention and control work effect.

### **3. Establish an Emergency Work System for Infection Prevention and Control**

**3.1 In accordance with national laws, regulations and technical guidelines, combined with the actual situation of the outbreak, the Office of Infection Control and the Medical Department of China quickly completed the revision of the COVID-19 Prevention and Control Work Plan (4th edition) of our hospital**

Considering the strengthening of supervision and management of epidemic prevention and control, establishing a series of systems and requirements, such as daily infection meeting system, infection control supervisor verification system, and sentinel monitoring and reporting management system, clarifying personnel responsibilities and implementing the division of labor, and using the coordination mechanism to provide a strong guarantee for infection prevention and control work.

**3.2 To ensure the Technical Guidelines for the Prevention and Control of Novel Coronavirus Infection in Medical Institutions (Third Edition)[4]The latest prevention and control knowledge is known and implemented in place**

The hospital urgently printed the “COVID-19 Prevention and Control Work Manual” in the pocket. In addition, important systems such as the selection of protective equipment and wear and off process, occupational exposure emergency treatment process are all on the wall, the corresponding departments can be consulted at any time when operation, effectively consolidating the training and assessment work. On this basis, the medical education department is mainly responsible for the “C CMTV” platform “hospital epidemic prevention and control, COVID-19 treatment scheme, hierarchical protection and protective equipment selection principle” online training and assessment, greatly improve the training participation and fragmentation time utilization, make the medical staff quickly master prevention and control skills, to ensure the professional safety.

### **4. Innovate the Working Mechanism for Infection Prevention and Control**

In accordance with the requirements of the joint prevention and control mechanism of The State Council for improving the infection control mechanism and the overall arrangement of the leading group for epidemic prevention and control, the following working mechanisms have been set up for the focus of infection prevention and control:

#### **4.1 Joint Inspection Mechanism in Order to Strengthen the Supervision of Infection Prevention and Control**

the joint working group will join the joint infection control office to be responsible for the supervision and inspection of all departments of the hospital every day, timely sort out the problems found, feedback and report on site, and follow-up supervision and rectification and include them in the list of problems for write-off management.

#### **4.2 Daily List Mechanism for Layout Process, Protective Equipment Selection and Correct Use**

preview triage and fever clinic health code abnormal personnel reception, inpatient ward management, outpatient “one meter line” order, medical technology and logistics requirements, medical staff health monitoring and report out, occupational exposure disposal, environmental

surface disinfection, medical waste disposal, to “list” loopholes, research and evaluate the feasibility, the key departments, link, crowd prevention and control work. For the problems on the “list”, compacting the responsibility to the department and people, and limit the time.

#### **4.3 Daily Infection Meeting Mechanism to Establish Daily Meeting Mechanism**

led by the director, key departments such as medical, nursing, sensory control, logistics, joint working group and other departments to attend, standard meeting process and content: including but not limited to the daily work list of propulsion, discussion, etc., for common and relatively difficult problems, submit daily collective discussion, with professional, responsible attitude to answer the department, and require its implementation. If the problem involves the functional department or hospital management level, the hospital leaders shall coordinate the whole and make reasonable improvement: For example, in order to complete the closed management of the inpatient ward, implement “bedside settlement” and “meal delivery service for hospital staff” to effectively ensure the implementation of prevention and control measures.

#### **4.4 Training assessment mechanism Establish a special training assessment mechanism for infection, deepen training content and expand training methods. In addition to the organization to carry out full training**

according to the job and nature hierarchy, classification don't carry out special training, especially for logistics personnel (including cleaning, catering, driver, medical waste transport, security) to strengthen the training and assessment, using vivid situational teaching method to ensure that all staff master the practical skills, training qualified.

#### **4.5 Health Monitoring Mechanism According to the Needs of Epidemic Prevention and Control**

health monitoring should be carried out for all personnel (including interns, training and training personnel), and daily health reports will be implemented. Special personnel shall be assigned to be responsible for health monitoring, including: body temperature, COVID-19 syndrome, health code, etc., to report any abnormalities in time, study, investigation and disposal, and reasonably carry out nucleic acid testing, chest CT, blood routine, antibody testing and other items. Regular nucleic acid testing for COVID-19 virus is carried out for all staff members and adjusted at any time according to the epidemic changes and policy requirements, and the testing frequency is constantly changed. After the local outbreak, high-risk personnel are tested the next day; the rest undergo nucleic acid tests twice a week.

#### **4.6 Infection Monitoring Mechanism Actively Carry out Environmental Sampling of Novel Coronavirus**

and refer to the Technical Specification for Novel Coronavirus Sample Collection on object Surface<sup>[5]</sup>Frequent human contact 2 times a week, especially respiratory droplets, excreta, vomit and other easily contaminated areas, were sampled to evaluate the surface safety of environmental objects, and ensure the timely detection of hidden dangers and risks.

#### **4.7 “Green Code”**

patient treatment mechanism for treatment during the outbreak of “green code” patients, maternal, according to the provincial health committee arrangement deployment, our hospital west district inpatient emergency open 2 layer area as internal medicine, pediatrics, surgery and obstetrics and gynecology will be coronavirus infection prevention and control ward, synchronous start structure restructuring, staffing, partition layout, treatment, equipment, personnel, system and other in 48 hours all ready in place, to receive “the green code” patients and maternal lay a solid foundation.

### **5. Suggestions on Maternal Management and Tcm Prevention and Control**

## **5.1 Management of Obstetric Patients Pay Moderate Exercise to Ensure Adequate Sleep**

Pay attention to personal hygiene, avoid touching the mouth, eyes and nose with uncleaned hands, and cover the mouth, nose with paper towels or use elbows when sneezing or coughing. For outdoor activities, shopping or medical treatment, avoid directly touching the surface of public objects, and conduct timely hand hygiene after touch. Daily necessities are used alone. Do a good job of self-health monitoring, timely consult a doctor or doctor. When going to the hospital for examination, try to shorten the treatment time, avoid centralized waiting, and wash your hands in time after returning home. Wear disposable medical masks, surgical masks or protective grade masks or above when going out or going to the hospital. Change the mask immediately after getting wet or dirty. During the period of respiratory diseases, try to go out less. If you need to go out, you should wear a mask correctly and do good hand hygiene. Reduce the participation in dinner parties, parties and other activities. Reduce travel to crowded or poorly ventilated places.

## **5.2 “Will Be Coronavirus Pneumonia Diagnosis and Treatment Plan (the Third Edition)”**

clear the COVID-19 belongs to the category of “disease” of traditional Chinese disease, disease because feel “plague”, in lung, involving spleen and stomach, basic characteristics is “wet, heat, poison, silt”, detoxification wet in the treatment, prevention stage is given priority to with solid table, recovery to yiqi nourishing Yin. Combined with the provincial health committee on further COVID-19 epidemic prevention and control work notice, active use of traditional Chinese medicine preventive medication, for medical staff, staff, outpatient and inpatient patients provide COVID-19 prevention Chinese medicine prescription -- gaps yellow plague prescription, the prescription by astragalus, windbreak, bran Fried white, forsythia, penetration, reed root, sand ginseng, etc. Astragalus can fill qi, Yang, solid surface and sweat, wind, wind, pain, spleen and qi, dry dampness and perspiration, forsythia, all have the effect of heat and detoxification, reed root, thirst, vomiting, diuresis; sand, Yin and lung, stomach and jin. In addition, COVID-19 prevention sachets are also provided for people in need. It is a traditional method commonly used in traditional Chinese medicine, which is mostly used in the prevention and rehabilitation stage of diseases. Ssam therapy is also recommended for the preventive or rehabilitation phase in the COVID-19 outbreak. Wear patchouli, Perrin, angelica dahurica, boricol and other drugs into powder and wear them in bags to avoid blast and prevent disease.

## **6. Conclusion**

In the future, the prevention and control of emerging infectious diseases of unknown cause represented by COVID-19 will be a public health event that should be focused on at the hospital and even the social level. With the development of the outbreak, in the current and future a period, various medical institutions pay special attention to will be coronavirus epidemic prevention and control and normal diagnosis and treatment activities will be a long-term coexistence, especially in response to local sudden COVID-19 epidemic, infection control aspects and link must be careful, any loopholes and does not reach the designated position, may bring unexpected losses.

In the letter of the Notice issued by the General Office of the NHC in 2018, infection prevention and control is the “main line” throughout the diagnosis and treatment activities, the “bottom line” to ensure patient safety, and the “red line” to practice in accordance with the law<sup>[6]</sup>, The level of infection prevention and control has been greatly improved. How to establish a scientific infection prevention and control system, in response to local epidemic, according to the actual situation to explore to establish effective infection prevention and control work mode, mechanism, to ensure that key departments (departments), key groups such as pregnant patients during this period safety treatment, hand hygiene, correctly wear masks, environmental cleaning and disinfection, medical waste disposal and the prevention and control measures of infection is the core. In addition, the preventive role of traditional Chinese medicine in China cannot be underestimated. The active use of traditional Chinese medicine as a preventive medication plays an active and irreplaceable role in the prevention and control of COVID-19.

To sum up, the COVID-19 outbreak in Gansu province, not only strengthen the full adhere to the bottom line thinking, practice of “everyone is sensory control practitioners” concept, strict infection prevention and control workflow and requirements, to minimize the infection probability, through accurate ShiCe, reveal the social and economic benefits of infection prevention and control work.

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