

Exploration of Infection Prevention and Control Practice of Designated Hospitals in During Corona Virus Disease 2019 Epidemic Period

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Abstract: Corona Virus Disease 2019 (COVID-19) is a new infectious disease that appeared in wuhan in December 2019 Since January 23, the national health and fitness commission has required hospitals to be designated in accordance with the principle of "concentrating patients, experts, resources and treatment". Designated hospitals are often the strength of the general hospital and general hospital complex layers of various kinds of personnel, campus area is large, multi-channel, ordinary outpatient accepts people more, for emergency and severe cases treatment in patients with normal difficulty pressure big, suspected/confirmed cases, combined with the COVID-19 occurred when the traditional holiday, the country launched the emergency response since, process reform faces a difficult labor, shortage of manpower, protective shortages, short time limit, and many other difficulties, hospital infection prevention and control is facing unprecedented pressure. In this paper, the West China-Guang'an Hospital, Sichuan University (Guang'an people's hospital) as a designated hospital, on the basis of the relevant scheme of the national health committee, epidemic prevention and control of the actual, combined with comprehensive hospital leadership, manpower allocation, protection, security, patient management, disinfection isolation, preview triage, preventive measures, training, monitoring, etc., with practical experience summary for the COVID-19 during the hospital infection prevention and control to improve the practice exploration.

Key words: Corona Virus Disease 2019(COVID-19); Designated hospitals;

Nosocomial infection prevention and control; Protective measures

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Since December 2019, pneumonia patients infected with covid-19 have been found successively in Wuhan^[1]. Our hospital received the first patient on January 16 and the first critically ill patient in Sichuan Province. On January 20, the National Health Commission announced that the pneumonia infected with covid-19 should be included in class B management and class A infectious disease prevention and control measures should be taken^[2]. The novel coronavirus infection hospital designated by the Sichuan provincial (city, district) level hospital was announced in January 23rd by the Sichuan Provincial Health Protection Commission. The general hospitals bear the burden of receiving and treating the confirmed patients, and become an important force of epidemic prevention and control. Hospital infection management is facing unprecedented pressure^[3]. According to the novel coronavirus pneumonia epidemiology analysis report published in Chinese Journal of epidemiology in February 17th, a total of 3019 medical staff were infected in February 11th. Novel coronavirus pneumonia is imminent in spite of the infection of the medical staff from the community or the hospital. This article introduces the novel coronavirus Hospital of West China Hospital of Sichuan University, which is a designated hospital in the city. According to the

relevant regulations of the state, it carries out the prevention and control of nosocomial infection of new type of coronavirus pneumonia from the aspects of organization leadership, manpower deployment, protection and protection, patient management, disinfection and isolation, pre examination, triage, preventive measures and training monitoring, etc., and summarizes the from the practical experience as the pre hospital infection in Guang'an. Provide reference for prevention and control^[4].

1 The general information

Sichuan University Huaxi Guang'an hospital (Guang'an people's Hospital) is the only third class a general hospital in Guang'an City, with an annual outpatient volume of about 900000, an annual inpatient volume of 70000, and more than 70000 sets of operations. In novel coronavirus pneumonia prevention and control work from January 16, 2020 to March 1, 2020, about 600 medical personnel were involved in the work, including 30 infectious, respiratory and critical care specialists, 32 specialist nurses and 70 other professional doctors. There are 10 standardized residents and 10 advanced students. There are 20 doctors and 20 nurses in the field, 12 support workers. Space adjustment construction workers (zoning and negative pressure ward) 30 person times. There were 2 cases of severe transport patients and 2 cases of common type patients. There were 17 confirmed cases, including 5 severe cases, 2 critical cases and 9 common cases. A total of 40 suspected cases were received. As of March 1, 13 cases were cured and discharged, including the first critically ill patient in the province, 40 cases were removed from isolation, and there are no serious and critical cases. Only 4 ordinary patients continue to be treated in hospital, achieving the management objectives of zero missed diagnosis, zero missed diagnosis, zero infection and zero death.

2 Prevention and control measures

2.1 Establish organization and leadership organization and start emergency response plan

Since the first novel coronavirus pneumonia was treated on January 16, 2019, the hospital attached great importance to the disease. Immediately, the expert treatment group was launched, and the emergency plan for the diagnosis and treatment of

unknown causes was initiated. The independent ward management was implemented, and the expert team composed of respiratory, infection and intensive care specialists was deployed for treatment. On January 24, Sichuan provincial government launched the first level emergency response to public health emergencies^[5]. Our hospital immediately established an emergency headquarters with the main leader as the commander, the vice president in charge of medical treatment, nursing and hospital sense as the deputy commander, and the hospital leader as the member. The hospital mobilizes, participates in, assesses all possible difficulties and risks, cancels all irrelevant meetings, holds regular prevention and control meetings every day, informs the national and provincial epidemic situation, introduces the progress of each group's work, and mainly studies the existing problems and solutions. It consists of 9 groups, including clinical treatment, hospital infection prevention and control, epidemic situation reporting, security, protection material support, scientific research and teaching, publicity and reporting, human resource allocation, supervision and supervision, with each leader in charge as the team leader. According to the division of labor, each group works in a highly efficient way with relative division of labor, overall coordination, full decentralization and accurate communication, A novel coronavirus pneumonia novel coronavirus pneumonia system was established, which was unified leadership, unified command and division of responsibilities. The leading bodies were quick to make decisions and precise measures. The departments and levels of the hospital were able to operate effectively and effectively in order to ensure the scientific, standardized and orderly prevention and control of the new crown pneumonia.

2.2 Integrate the human resources of the whole hospital and improve the guarantee of medical staff

After the outbreak, human resources of the hospital were mainly integrated from the following four aspects: Our hospital immediately stops all vacations, cancels all going out to study and asking for leave, and the staff of the hospital enters the war readiness state, integrates the human resources of the whole hospital, unified command and unified dispatching. Novel coronavirus pneumonia is a respiratory infectious disease. Professional physicians in

respiratory, severe and infection play an irreplaceable role in the treatment process, but they are faced with severe shortage of talents. According to the national prevention and control requirements, combined with the actual situation of our hospital, and integrating the human resources of the whole hospital, the management mode of "specialty oriented, medical assisted, new old matching, medical care matching, functional matching" is proposed. Three channel management is implemented in the whole hospital area^[6], in terms of human resource integration, the implementation of specialized doctors as the main part, with the support of medical background personnel in the general manager, and mutual matching of temperature detection and epidemiological history inquiry to ensure the quality of screening. The management of isolated ward shall be carried out with the combination of new and old, and medical care. The combination of the old and the new for the front-line medical staff not only ensures the connection of the patient's condition handover and treatment, but also eliminates the risk of fatigue operation and occupational exposure of the medical staff. The suspected / confirmed patients shall be managed by a team of specialists in respiratory, severe and infectious diseases, in cooperation with specialized nurses familiar with ventilator and ECMO. In terms of nursing level, it is also necessary to implement the combination of old and new to achieve the mutual supplement of clinical experience and physical energy, which is conducive to the inheritance of professionalism and the cultivation of young team. For fever clinic and pre examination triage, respiratory and infection professional doctors should be combined with physicians to rotate regularly, so that doctors in our hospital can cooperate with members of regular training and follow-up learning in other hospitals, which is not only conducive to teachers' guidance and students' follow-up training, but also ensures the quality of fever clinic and pre examination triage; ④ The solid functional matching of patients' transport in isolated ward, i.e. "1 + 2 + 3 + 1", i.e. "1 specialist + 2 specialist nurses + 3 security guards + 1 cleaner", is a fixed basic mode of transport. The specialist is responsible for the transfer of medical safety, the specialist nurses are responsible for the transfer of pipeline nursing and equipment monitoring, the hospital infection management department is responsible for the

confirmation and supervision of the line, the security department is responsible for the maintenance of the medical order of the line, and the cleaning company is responsible for the killing and disposal along the way. Of course, the strength of medical staff can be increased according to the patient's situation, but in principle, it cannot be reduced.

At the same time, it also improves the medical staff security from the following four aspects. Four measures, positive guidance, personal care, family encouragement and negative warning, are implemented to ensure the protection of medical personnel. Front guidance: According to the characteristics of high pressure and heavy load of front-line personnel, wechat and other platforms are used to conduct positive guidance, not to release false information, firmly not to believe, not to spread rumors, not to panic excessively. In view of the actual situation of epidemic prevention and control work, a column of prevention and control "epidemic" line will be opened up to publicize and display the advanced models and working conditions, so as to create a loving and dedicated atmosphere. The success of our hospital's treatment cases on CCTV platform has also encouraged the fight against the epidemic. In the work, we should also give full play to the vanguard and exemplary role of Party members and cadres and the leading role of leading cadres. The backbone should go deep into the front line, to the end, to the side, and do it in person to ensure the actual effect. Personal care: Establish health account and dynamic management. Employees with high psychological pressure and emotional fluctuation should be adjusted in time. Turn on the rotation system to ensure the physical and mental health of front-line employees. Forced rest for 5 days for all the medical staff on duty alleviated their family's worries, avoided their fatigue fighting, and laid a solid foundation for winning the epidemic prevention and control. In line with the national policy, we will make an oath, show the hot line of outstanding personnel to join the party, break the rules and promote them, and provide growth and progress space and development platform for employees who actively contribute^[7]. Family motivation: Under the leadership of the labor union, we will carry out the care and care actions of the staff's family members, improve the convenience of the support of living materials, the care of children and the elderly, and relieve the worries of front-

line medical staff. At the same time, the family's encouragement and feedback can better motivate the staff's front-line work morale, and provide a strong impetus for the prevention and control of hospital infection. Reverse warning: In view of the continuous pressure of epidemic prevention and control, the typical cases of hospital clustering events that are publicly reported are regularly collected and pushed to warn everyone.

2.3 Reengineering the material purchase process to ensure that the prevention and control materials are in place

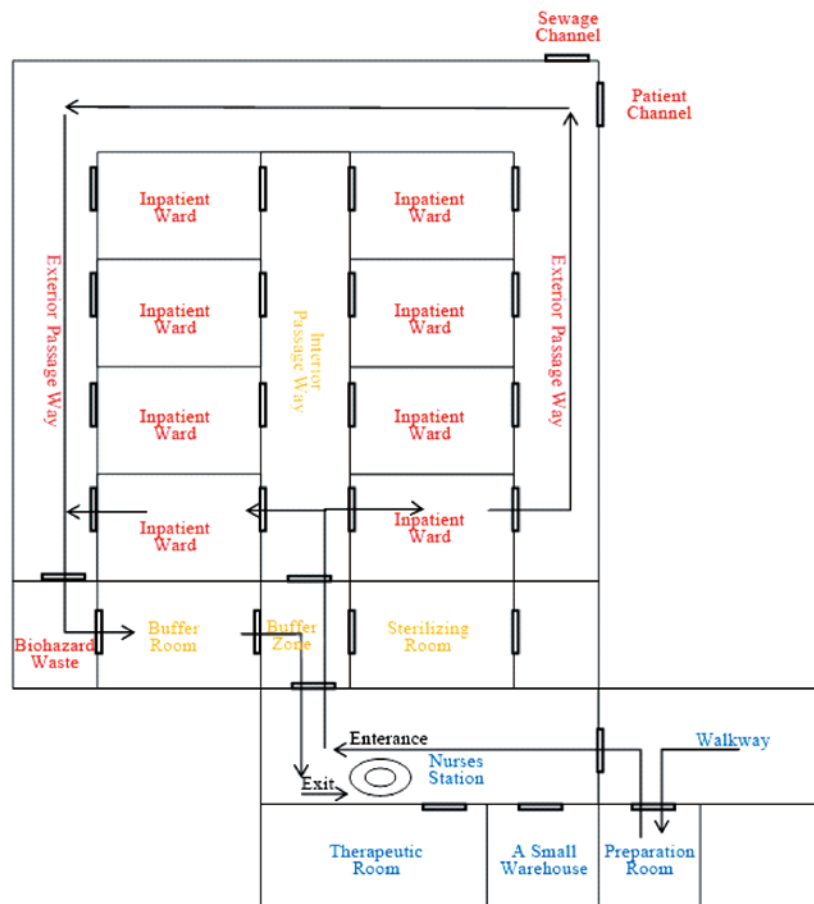
Establish a strong medical protection material guarantee system. The epidemic occurred during the Spring Festival holiday, when the population of the whole country reached the flow, and the enterprise was in a state of comprehensive leave and shutdown, especially material shortage^[8]. The shortage of protective materials has become the biggest bottleneck of prevention and control. In order to ensure the smooth implementation of the prevention and control work, adjust the procurement and distribution process, the logistics support group is fully responsible for the procurement and management of materials, the prevention and control group is responsible for strictly controlling the material protection requirements of each post, and the separation and classification management of patients in the hospital, so that the materials are carried out in an orderly manner from supply to use. Since January 23, traffic control has been started in succession throughout the country, and Guang'an City, as an underdeveloped area in the west, has been more strict in travel. Logistics support group, through a variety of channels to raise protection materials, specially assigned personnel to receive materials to transport the supply chain, to ensure the supply of protection materials. At the same time, the society began to raise funds for emergency protection materials, which effectively guaranteed the orderly progress of prevention and control work. On the other hand, under the premise of internal standard protection,

saving use and reasonable deployment are the key measures. Daily inventory, real-time inventory, dynamic management of material inventory, infection management department according to the prevention and control requirements of each department, overall deployment, to maximize the protection of front-line medical staff, especially the supply of protective equipment for high-risk posts.

2.4 Strengthen the management of new crown patients and control the spread of infection sources

2.4.1 Isolation ward management

In order to facilitate the management of isolated disease areas and the standard and reasonable docking with common disease areas. We have implemented strict zoning and route management. Eleven road maps have been developed. The passage for staff and patients, and the transfer route for critical patients were defined. Isolate the treatment of patients in the ward, implement "one person, one policy", integrate traditional Chinese and Western medicine, experts discuss and consult regularly, combine health education and psychological guidance to build patient confidence. According to the individual differences and basic conditions of patients, we should formulate a daily nutritious diet, implement the principle of centralized catering and special personnel transfer, not only to ensure nutrition and hot card, but also to eliminate cross infection. The novel coronavirus infection prevention and control technology guide in medical institutions is set up in strict accordance with the management of isolation wards. The ward is equipped with pollution area, semi pollution area and cleaning area. The disease is managed by color separation, and the staff and patients are separated. Suspected patients and confirmed patients should be divided into different departments. Suspected patients can be placed in a single room. Patients confirmed by etiology can be treated in the same room. On the basis of standard prevention, measures such as contact isolation, droplet isolation and air isolation are taken^[9]. See Figure 1.



Note: (1) Wear protective equipment in preparation room; (2) Remove protective clothing in biohazard waste; (3) Remove hat and medical protective mask in buffer room; (4) Wear surgical mask and hat in buffer room.

Figure 1. Chart of flow of staff in Isolation A

2.4.2 General ward patient management

Develop emergency plans for different disciplines. Special attention should be paid to emergency operation and management of pregnant women. The novel coronavirus pneumonia operation emergency surgery recommended novel coronavirus pneumonia and emergency treatment plan for new crown pneumonia were formulated. The protection level, the use of negative pressure operating room, the transfer process of relevant departments and the management of close contacts were clarified. The implementation of the novel coronavirus pneumonia system is to implement the first doctor responsibility system. Patients are admitted to the hospital and discharged from the hospital. The doctors are responsible for carrying out the standardized transshipment after operation, and close the management in the isolation ward. The new crown pneumonia clinical treatment expert group rounds the ward together,

and the specialist in charge of the specialist makes the assessment to ensure that the treatment is standardized, scientific and individualized.

2.5 Implement disinfection and isolation measures and cut off the transmission channels in the hospital

2.5.1 Implement "three channels" management

Implement "three channels" management, control all channels in the hospital area, and implement process reengineering. VAdjust all the original six channels and implement three channel management. The hospital covers an area of more than 170 mu, which is divided into staff channel, common outpatient channel and fever patient channel. At the same time, implement one-way streamline management and separate management of entrance and exit to minimize personnel flow. Medical staff in the hospital, nursing workers, administrative

and logistics personnel, regular trainees, advanced students, interns, temporary support personnel, and medical institutions in the city follow the class to learn medical staff, and issue employee cards. All personnel are under the centralized management of the Department, and an information account based on temperature detection and contact history is established. Report the abnormal situation to the prevention and control group of the headquarters every day. See Figure 2.

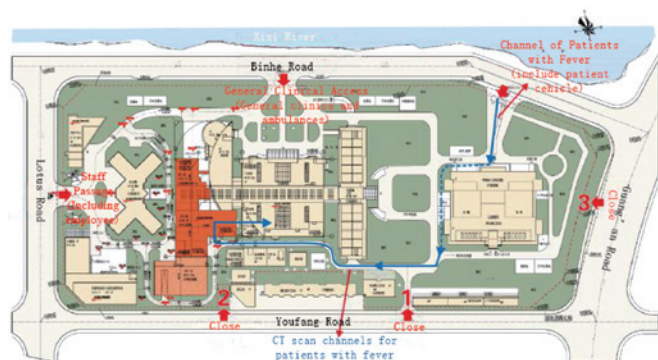


Figure 2. Diagram of "three channels" management process reengineering

2.5.2 Strict visitation system

Develop and implement the visiting system for inpatients during the epidemic and control the inpatient building. In principle, it is not allowed to visit, and it is recommended to visit by phone or video without special circumstances. At the same time, the temperature and abnormal condition of the company were monitored every day.

2.5.3 Strictly implement disinfection, cleaning and epidemic management

Depending on the property management personnel and outpatient staff, different cleaning and disinfection are carried out for the common door area, auxiliary examination department diagnosis area, key diagnosis area, public area and facilities and equipment in the outpatient diagnosis and treatment area. In particular, strengthen the hand hygiene of medical staff, set up cartoon posters to display and remind. The novel coronavirus pneumonia novel coronavirus pneumonia technical guidelines for clinical laboratory were strictly implemented in the laboratory. Combined with the hospital practice, the "new crown pneumonia detection biological safety protection measures and plans" were established, and the process of collection, transfer, handover and disposal of waste specimens were clearly defined. The

manual for negative pressure laboratory was worked out, and the standards and measures for cleaning the surface and disinfection of the environment were strictly established. Ensure the safety of the laboratory in the hospital.

2.6 Strict three-level pre examination and triage, early identification of suspicious patients

Strictly implement the three-level pre examination and triage, timely refer suspected patients to fever clinic, assign special personnel to accompany them through special channels and implement handover. Each outpatient clinic strictly follows the requirements of "one doctor, one patient, one consulting room". Each floor, each diagnosis area and each triage point implements grid and localized management. Each medical technology department arranges shifts according to flexibility to avoid the gathering of personnel in peak period. The novel coronavirus pneumonia epidemiology history inquiry system was formulated. The doctors in charge of occupation strictly implemented the first diagnosis responsibility system, signed the "notification of patients and family members' responsibility during the epidemic period", and eliminated the patients and their families' concealment of medical history for various reasons, and eliminated missed diagnosis and missing reports, thus reducing occupational exposure of medical staff. With the help of information means, the examination of body temperature and the inquiry of epidemiological history are required, and the format is solidified to ensure that the third level triage is not missed.

The Department formulated novel coronavirus pneumonia emergency patients and close contacts and suspected patients emergency plans. The general departments set up a prevention and control group to determine the emergency isolation ward of each ward and carry out drills. The unified process is as follows: single room isolation - restricted access to the ward (room) - consultation discussion by the clinical treatment expert group - consultation cannot be excluded - isolation protection and disinfection field guidance by the sensory control group - special personnel to take samples and send them for examination - appointment of CT examination, special personnel to escort the special channel for examination - after consultation consideration - isolation of the ward or single room to continue

isolation. In the process of novel coronavirus pneumonia, the scientific cognition and emergency handling ability of new crown pneumonia are emphasized, so as to avoid unnecessary panic and eliminate the huge waste of medical resources, so that other patients delay the diagnosis and treatment, and bring negative effects to patients and hospitals^[10].

2.7 Standardize the preventive measures at all levels to prevent exposure and eliminate infection

WHO recommended five measures, which we summed up as space protection, transport protection and construction protection^[11].

2.7.1 Space protection

The hospital quickly launched the emergency evacuation plan, conducted classified evacuation for more than 200 patients in the ward, and integrated the departments. After two days of emergency evacuation, an independent internal medicine building was vacated in three areas, with 70 wards and 96 beds for observation and suspected/isolated patients. According to the follow-up and follow-up, there was no adverse event caused by transportation and evacuation. The hospital sense prevention and control group further strengthened the management of fever outpatient service and pre examination triage, and responded to the peak of suspected patients. The fever clinic strictly follows the requirements of secondary triage, implements the general fever clinic and special fever clinic, delimits the waiting area for observation, eliminates the cross infection of fever patients in the general outpatient and avoids cross infection. CT inspection shall be reserved, accompanied by special personnel, special route, special plane inspection and timely return to the observation waiting area. The observation waiting area realizes registration, blood sampling, self printing of inspection report and CT inspection report, which not only improves patients' medical experience but also reduces space flow.

2.7.2 Transport protection

Formulate strict transfer system and process, define pre transfer preparation and transfer route, and implement drill to ensure training and assessment in place. 3 patients with novel coronavirus pneumonia in the hospital were implemented in a timely, safe and quick way, without any infection of medical staff.

2.7.3 Construction protection

In the process of emergency construction of negative

pressure ward, hospital sense prevention and control, especially the occupational exposure risk of construction personnel, is always put in the first place, so as to prevent and guard strictly. The management mode of early-stage training, process supervision and late tracking shall be watched by special personnel, promoted by special shift, and communication and progress notification with the headquarters shall be kept at all times to ensure the construction progress and protection in place. Within 5 days of emergency construction, no adverse hospital events occurred.

2.8 Innovate training and monitoring mode, and comprehensively strengthen infection prevention and control

Three measures to consolidate the innovative training mode.

2.8.1 Compaction responsibility, ensure training see action

Through centralized, sub time, on-site, wechat, video and other forms of training for the whole staff, so that everyone can pass the test. The department director is the first person in charge of the Department. According to the specific situation of the Department, on the premise of maintaining the prescribed actions, the Department Director formulates the Department training outline, training plan and training method by himself, which not only transfers the pressure but also mobilizes the director's enthusiasm.

2.8.2 Continue to work hard to ensure that the training is targeted

According to the needs of the epidemic situation, we should continue to make efforts to update the training content and expand the depth and breadth of the training. First of all, we will carry out training in the law of the people's Republic of China on the prevention and control of infectious diseases and other laws and regulations, focusing on improving everyone's awareness of prevention and control, recognizing the situation, transferring pressure, taking responsibility and solving ideological problems. Secondly, it is mainly to learn the diagnosis and treatment plan and prevention and control guide, strengthen the supervision of key departments, and solve the problem of ability. Novel coronavirus pneumonia prevention and control manual of Sichuan University West China Hospital Guang'an was developed and published according

to the development of the epidemic and the process of reconstructing the hospital channel. For front-line medical staff, hand hygiene and the training of wearing and taking off protective clothing become a daily Song, which must be asked. Ensure that the protective measures are implemented in place and that the standardized actions are implemented in place. Through strict management, there is no case of close contact without protection^[12].

2.8.3 Adjust the way to ensure the effectiveness of training

Focus on key departments: During the training of fever clinic, isolation ward, pre examination triage and emergency clinic, the weak links were investigated^[13]. Cleaning and transportation become the difficulty of hospital sense protection. The average age is 58 years old (49-60 years old), the educational background is almost primary school (99% in primary school, 1% in junior high school), the learning and understanding ability is deficient, the economic conditions are relatively low (95% in rural areas, 4% in suburban areas, 1% in urban residents), the compliance is poor, the resignation rate is high, the turnover of personnel is fast (the resignation rate in isolated ward in January is as high as 85%), and the manpower is short (according to the evaluation of human resources, the staffing is only 30% of normal)). The training management mode of "five changes and three invariances" has achieved good results. "Five changes": One is the change of training content. Turn professional knowledge into popular vernacular, and turn unsmooth words into interesting icons. Second, the training mode has changed. Change centralized training to individualized training, change rigid training to health care and family routine, and mobilize everyone's enthusiasm. Third, the way of catering has changed. We should change our solution into centralized catering, separate eating and nutrition matching, give humanistic care and stabilize the team. Fourth, the way of assessment has also changed. Change the deduction that is not implemented in place to reward the materials with strong execution and excellent assessment in time, and encourage the employees to implement it actively. Fifth, change of work tasks. Allocate the strength of nursing professionals, share the work of cleaning, disinfection, cleaning of materials and surfaces, and reduce the exposure time of nursing workers.

"Three unchangeable": First, the quality standards for prevention and control cannot be changed. In case of large potential safety hazard and poor implementation of prevention and control measures, it is necessary to replace them decisively to plug the loopholes. Second, the health test cannot be changed. Check and control the physical condition every day. The third is that the standard of employment cannot be changed. Physical discomfort, too tired, many basic diseases, inadequate understanding, and inadequate training of new recruits.

Two aspects to do a good job in innovative infection monitoring mode. Do the required actions. Do a good job in early warning and prediction, strengthen the supervision and guidance of infection prevention and control, find hidden dangers, and timely follow up the disease improvement. If suspected or confirmed cases are found, they shall be connected with the infection management department in time, and the prevention and control group shall be involved in the work in time to deal with them properly. A novel coronavirus management system for outpatient three levels of pre - triage has been worked out, and the process of handling suspected new coronavirus pneumonia has been worked out. The novel coronavirus pneumonia prevention and control self check list was formulated, and the Department supervised and corrected itself. Those who fail to pass the training and assessment, or whose physical condition is not up to the standard, shall not be allowed to work. Make up your own actions. To build a safety culture of actively reporting hospital infection and preventing adverse events. Encourage everyone to report in various forms, and actively think about process reengineering and hidden danger elimination. Since the campaign, more than 30 adverse events have been collected, which effectively guaranteed the occurrence of hospital infection.

3 Discussion

3.1 Improve the prevention and control organization system

The specific characteristics of sudden, complex, destructive and unpredictable public health emergencies are related to the safety of people's lives and social stability^[14]. Our prevention and control work is restricted by the clinical technology level, human resource reserve, logistics support and

economic level of the designated hospitals. Medical staff, patients with infectious diseases and leading cadres are key groups in the prevention and control of major epidemics^[15]. With the understanding of the disease, the relevant diagnosis and treatment plans and guidelines are also dynamically adjusted, which requires the designated hospitals to gradually improve the prevention and control organization system in the process of practice, not only to solve the ideological problems, but also to solve the problems of ability and path, so as to ensure the efficient operation of the prevention and control system.

3.2 Improve the early warning response mechanism

From the experience of developed countries, a comprehensive, three-dimensional and flexible emergency early warning and response system is very important. A sound infectious disease monitoring and early warning response mechanism is the prerequisite for the treatment of public health emergencies from the source. As a novel coronavirus pneumonia treatment process, how to improve the early warning response mechanism is a common topic. Non designated hospitals "turn around", designated hospitals "close", disease control departments "ask", local government "close" can not solve all the problems. Early warning response mechanism should include timely and effective communication with CDC, and establish an efficient and professional treatment team. With internet plus medical consultation mode, emergency outpatient plan for outpatient, fever clinic, common ward, "early detection, early diagnosis and early treatment", early warning recognition for suspected / confirmed patients will be established. Scientific early warning mechanism is not only conducive to the scientific prevention and control of new infectious diseases, but also to eliminate the waste of medical resources^[16].

3.3 Improve emergency management system

We should build a systematic legal system for emergency response and strengthen the construction of institutional mechanisms. As a designated hospital, due to the shortage of protective materials, the pressure of hospital infection prevention and control has been increased. In addition, the distribution of logistics is not timely. The construction of negative pressure vehicle, negative pressure cabin, negative pressure laboratory and negative pressure ward is even more difficult, and the burden of hospital

prevention and control is even heavier. According to the practice of the United States and Japan, we should establish a systematic, all-round and multi-level emergency legal system for health emergencies and adequate human, physical and financial support. At the same time, we should strengthen the reserve of strategic materials for prevention and control, such as prevention and control materials, beds, inspection and inspection equipment. When necessary, we should enter the wartime state. The state should unify according to the local epidemic situation and the specific situation of patients One deployment^[16].

3.4 Strengthen the discipline construction of infection and infection

Due to historical reasons, most of the infection departments and hospital infection management departments of many designated hospitals are transferred from nursing specialty, which has the problems of lack of talents, unreasonable echelon, high requirements, heavy tasks and poor treatment. Facing the novel coronavirus pneumonia prevention and control situation, it is impossible to solve the prevention and control work of rectification and designated hospitals. The infection department is based on the clinical diagnosis and treatment of infectious diseases, while the hospital infection management department is based on the prevention and control of infection in medical institutions^[17]. In order to deal with public health emergencies, especially the treatment of major infectious diseases, we should allocate sufficient number and structure of personnel to meet the work needs, attract high-quality personnel, and establish a professional team suitable for modern hospital management. At the same time, from the policy level, we will provide guarantee for promotion, promotion and income, provide training and learning opportunities, and build a reasonable echelon^[18].

3.5 Emphasis on emergency infrastructure equipment planning and construction

The coming of new infectious diseases brings severe challenges to our emergency infrastructure planning and construction. As a designated hospital, the usual financial investment is not enough, the construction is difficult, and the daily operation cost is high. Through the outbreak of novel coronavirus pneumonia, the government should constantly strengthen the planning and construction of emergency infrastructure facilities

in the management of public health emergencies, especially new infectious diseases, and establish a long-term mechanism. As the treatment center of critical patients in the area, the municipal designated hospital should have certain scale and capacity in equipment planning and construction, such as the unified requirements for the number and quality of negative pressure ward, negative pressure transfer vehicle, negative pressure laboratory, negative pressure operating room, ECMO, mobile CT and other equipment, visual system of isolation ward, artificial intelligent management, remote multiple. The configuration of cardiac consultation system and unified epidemic information reporting system ensures the scientific and orderly development of hospital infection prevention and control while carrying out the treatment of critical patients^[17].

This paper summarizes the practice and exploration of Guang'an people's Hospital as a designated hospital at the municipal level in terms of organizational leadership, human resources, material security, patient management, disinfection and isolation, pre examination and triage, prevention and control, training and monitoring, etc. according to the needs of epidemic prevention and control, and also triggers the designated hospital's organizational management, early warning response, emergency management, discipline construction and planning construction Face to face thinking. The novel coronavirus pneumonia is a new infectious disease. According to the February 16th WHO 2019 coronavirus (COVID-19) epidemic report (twenty-five), the understanding of the transmission mode, severity, clinical features and risk factors of infection is still limited. In order to prevent and control nosocomial infection, it is necessary to practice in designated hospitals.

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