

Review Article**Role of general Practitioners Novel Coronavirus Pneumonia in prevention and control of Epidemic Situation**

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Abstract

Novel coronavirus pneumonia has been found in Wuhan, Hubei since the end of December 2019, and has gradually spread throughout the country. In order to control the new epidemic situation, the country launched a major public health level 1 emergency response, implemented nationwide traffic control and travel restrictions, and required the masses to be isolated at home and spread the way to reduce the chance of infection; general practitioners, as the "gatekeeper" of community health, gave full play to their continuous management and service of patients in community places during the epidemic period, for families and Individuals provide continuous, accessible, comprehensive and individualized medical care, health maintenance and prevention services; they can find and deal with suspected patients in early stage, find and isolate infected patients in time, cut off the route of transmission, evaluate and protect vulnerable people. They take active prevention and control measures to avoid the expansion and further development of the event and protect the public from damage At the same time, it is responsible for the routine treatment and follow-up of the patients with chronic diseases at home, giving medication guidance to the patients with chronic diseases, and timely referral in case of acute aggravation of chronic diseases. During the epidemic period, it is also necessary to pay attention to the psychological changes of such patients, and psychological counseling if necessary.

Keyword: novel coronavirus pneumonia; general practitioner; epidemic prevention and control; psychological counseling

2019-nCoV

Since the end of December 2019, many cases of "fever with pneumonia of unknown cause" have occurred in succession in Wuhan City, Hubei Province [1]. After laboratory genetic testing and virus isolation, it was determined that it was pneumonia caused by novel coronavirus (2019 nCoV) infection. On February 8, 2020, the National Health Commission uniformly called the pneumonia infected by novel coronavirus "novel coronavirus pneumonia" (NCP), abbreviated to "COVID-19". On February 12, 2020, the World Health Organization announced that the disease caused by this virus was officially named "covid-19".

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Coronavirus belongs to Coronaviridae, a kind of enveloped, non-segmented positive strand RNA virus, which is widely distributed between humans and other mammals [2]. Coronavirus infection mainly causes respiratory manifestations and digestive tract manifestations. The severity of the disease varies from mild self-limited diseases such as common cold to severe pneumonia and even multiple organ dysfunction. Among them, four kinds of coronaviruses (229E, OC43, NL63 and HKU1) can cause infection in the population, and the epidemic is widespread. However, it is mainly proved that 2019-nCoV belongs to the genus of coronavirus B after a cold, which is similar to SARS-CoV MERS-CoV belongs to the same genus. Further analysis of blood samples from patients with 2019-nCoV pneumonia showed that 2019-nCoV infection could increase Th1 response in patients, leading to more symptoms. At the same time, the levels of IL-4 and IL-10 in infected patients also increased, indicating that they were accompanied by increased Th2 response [3]. The other two SRAS-CoV and MERS-CoV can cause fatal diseases, which belong to zoonosis [4]. The mortality rate of SARS-CoV infection is 9%, and that of MERS-CoV infection is 36% [5].

Novel coronavirus pneumonia (COVID-19)

Epidemiological investigation shows that the incubation period of COVID-19 is generally 1 D-14 D, with an average of 3D-7D. The main clinical manifestations are usually fever, fatigue, dry cough, etc. [3], and some patients may show atypical symptoms such as chest tightness, abdominal pain, etc. Severe patients have dyspnea in about one week, which can further progress to acute respiratory distress syndrome, septic shock, metabolic acidosis that is difficult to correct, and bleeding and coagulation dysfunction [6]. Most of the patients are mild/moderate clinically, showing non pneumonia and mild pneumonia symptoms, accounting for about 80%. 1.0-1.3% of the patients may have no clinical symptoms, and these patients are asymptomatic carriers [7]. Most patients with COVID-19 have a good prognosis, and a few patients are critically ill or even dead. The death cases are mostly seen in the elderly and patients with chronic basic diseases [8]. In view of the seriousness of the COVID-19 epidemic and its wide range [9], the state has launched a first-level response to major public health events, requiring all regions to adopt strict prevention and con-

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trol policies, and hospitals at all levels have also taken strict prevention and control measures to resolutely win the "battle of resistance" against COVID-19. The whole country, society and medical institutions, Even every family and every person have taken on their due mission in the fight against COVID-19.

The role of general practitioners in the prevention and control of COVID-19.

As the "gatekeeper" of community health problems, general practitioners not only shoulder the routine treatment and management of daily patients, including chronic disease patients, but also actively respond to the call of the state under the COVID-19 epidemic, give full play to their own advantages, actively participate in community residents' home care, screening of fever patients, pre-screening and triage, and patient management at isolation points.

Infection source screening and control

Controlling the source of infection is a very important link to cut off the transmission. 1) First of all, general practitioners are the most basic medical units. Their daily work goes deep into the community, and they are very familiar with and understand the community residents under their jurisdiction, including the overall health situation, living habits, whether they often go out, etc; 2) Secondly, medical isolation and observation shall be carried out for the returned fattening personnel from other places, temperature measurement shall be established at the entrance of each community, temperature measurement shall be established at each transportation hub, and patients with fever shall be transferred to isolation and treatment in a timely manner if they are found; Close contacts who contact suspected cases or confirmed cases shall be subject to medical isolation and observation, so as to control potential hidden infectious sources, indirectly cut off the corresponding transmission routes, and quickly prevent the spread of the epidemic; 3) During the home isolation of COVID-19 recovered patients, the isolation system shall be strictly implemented, and the symptoms and temperature changes of patients shall be closely observed. Any abnormality found shall be referred to the hospital in time. The past practice tells us that general practitioners are undoubtedly an important force in various measures taken to fight against the SARS epidemic and in controlling the overall and local sources of infection.

Blocking the transmission route:

The route of transmission is another necessary link for the outbreak of an epidemic. The transmission routes of the new crown cutting include: 1) For the community under the jurisdiction of each general practitioner, everyone's mobility is the focus of work, reducing the communication with the epidemic area, taking medical observation and health testing for the "incoming and returning fertilizer" personnel, and isolating the abnormal patients in time; 2) Urge all residents in and out of the community to wear masks and measure their body temperature, guide patients to isolate at home to disinfect the home environment, maintain home hygiene and personal protection, etc; 3) Set up temperature monitoring points at transport hubs, supermarkets and high-speed entrances and exits to measure body temperature, isolate and treat those found abnormal on the spot.

Care for isolated people at home

For the need of epidemic prevention and control, the state launched the first level response to major public health events, requiring the broad masses of people to consciously isolate themselves at home, on the one hand, to control the source of infection and protect vulnerable populations; On the other hand, cut off the transmission route and control the transmission scope. However, for residents isolated at home, especially the elderly patients with chronic diseases, continuous and comprehensive medical services are needed, which is the advantage of general practitioners.1) Guidance on drug use for chronic diseases: people with chronic diseases are often elderly people, often combined with multiple basic diseases, and need to take multiple drugs to control the condition for a long time. For this kind of people, they need to give guidance on drug use frequently. On the one hand, they should urge patients to use drugs regularly on time to develop the habit of regular use. On the other hand, they should know about the treatment effect and whether there are adverse drug reactions, so as to dynamically adjust the drug treatment plan to achieve the best treatment effect.2) Psychological counseling: other relevant people in the epidemic area affected by the epidemic prevention and control measures include vulnerable people, the general public, etc. Because their work and life are affected to varying degrees, they usually have panic, excessive anxiety, irritability and other psychological reactions [10]; Elderly patients with chronic diseases are more likely to suffer from psychological problems due to the epidemic situation; Corresponding psychological comfort should be given in time to relieve anxiety and psychological pressure of patients, so as to avoid aggravation of chronic diseases.3) Daily protection guidance for people who are isolated at home, especially those with chronic diseases, usually have a variety of basic diseases and poor resistance. They are susceptible to novel coronavirus. For such people, personal protection needs to be strengthened to avoid infection. In case of fever, fatigue and other symptoms, it is recommended to go to the local fever clinic in time to rule out the fever caused by novel coronavirus infection. When returning to hospital for treatment, public transportation should be minimized. During their stay at home, they and their family members should try to avoid going out for parties, visiting relatives and friends, and pay more attention to avoid contacting people returning from the epidemic area. For the weak or malnourished, pay attention to nutrition, wash hands frequently, keep the room dry and ventilated regularly. Wear a mask when going out; Keep a good routine and good attitude.

Care of personnel at isolation point:

The isolation point observers are usually the close contacts who contact suspected cases or confirmed cases to implement medical isolation observers. First, control the possible asymptomatic infectious sources; second, focus on observation, so that patients with symptoms or fever can be found as early as possible, and timely transfer to isolation treatment to protect vulnerable populations.1) Temperature monitoring: guide the isolation personnel to learn and master the correct method of temperature measurement; Temperature shall be measured regularly and recorded during isolation; In case of fever, cough and other symptoms, report to the monitoring personnel in time, and wear a mask to go to the outpatient clinic of the designated hospital

in time.2) Because the study of novel coronavirus pneumonia found that there may be fecal transmission routes, in addition to pharyngeal swabs, relevant samples such as feces and blood should be collected clinically, and coordination and cooperation with relevant units and departments should be actively carried out to further determine the transmission routes;3) Personal protection and disinfection: strictly implement the isolation system to reduce cross infection; Keep good personal hygiene habits, keep the room ventilated, wash hands frequently, and keep it clean; Pay attention to disinfection of living environment, and wear medical surgical mask or N95 mask when going out.4) Psychological counseling: It is normal for isolation point personnel to have fear and anxiety due to isolation and worry about whether they are infected; There may even be severe anxiety; Support and comfort the isolated personnel. Tell them that novel coronavirus pneumonia can be cured, and help them build up confidence in overcoming the disease. Communicate effectively "patient-centered" in an all-round way. Use encouraging and praising words to communicate with patients, talk with patients, and provide humanistic care. Inform that the treatment expenses related to novel coronavirus pneumonia belong to the scope of national medical insurance reimbursement, and eliminate the economic burden of patients. At the same time, we will strengthen social support for families of isolated persons, so that their families can communicate with patients on social networks such as telephone and We Chat in a timely manner. For patients with severe anxiety, timely intervene by evaluating their psychological status [11]. If necessary, ask the psychological medical team to meet the psychological needs of patients in special periods.5) Exercise and diet guidance: guide patients to take active exercise, which can promote human health and improve immunity. At the same time, formulate individualized diet plan according to the specific situation of patients. The general director should focus on light and digestible food, appropriately increase egg, milk and other high egg white food, increase protein intake, and avoid greasy food; Get enough sleep.

Health education

In various responsible communities, isolation points and monitoring stations, broadcasting is used to publicize novel coronavirus personal protection knowledge, personal temperature monitoring, medical guidance and various knowledge from time to time, ensure patient safety, guide medical treatment, and issue disease-related health education brochures. This article introduces the relevant knowledge of novel coronavirus infection and pneumonia, how to isolate at home, the ways of coughing and sneezing, and the precautions for observation and isolation, and prompts patients to follow-up and seek medical treatment in time if they feel unwell. For patients who have recovered from COVID-19 and have been discharged from hospital, follow-up visits should be made on time according to medical advice.

General practice medicine is a "patient-centered" comprehensive health service integrating medical treatment, prevention, health care, rehabilitation and health education. General practitioners, as grass-roots medical workers, have their own specific advantages in their services because of their unique nature. In the prevention and control of COVID-19, the work of general practitioners focuses on the pre onset stage and the follow-up after treatment. The prevention, health care and health education of general practitioners will also become a powerful weapon to defeat the epidemic. As the "gatekeeper" of community health problems, general practitioners are the first and pioneer of public health emergencies and play an important role in responding to public health emergencies. Therefore, we should constantly strengthen the ability of general practitioners to respond to public health emergencies, give full play to their positive role, effectively prevent and control public health emergencies, so as to protect public health more effectively, effectively and orderly, and become an outstanding "gatekeeper" of community health issues.

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