

Upgrading and Innovation of Hospital Services in Colleges and Universities under Closed Management of Epidemic Situation

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Abstract

In the face of the explosive and multi-point spread characteristics of the current epidemic situation, as the key place to tackle epidemic prevention, the closed management of colleges and universities is necessary. As the main force to ensure the physical and mental health of teachers and students in colleges and universities under closed management, how to deal with the growth and diversification of medical demand under the normal situation of epidemic prevention is an urgent problem to be solved. Based on literature analysis and case investigation, this paper discusses the upgrading and innovation of university hospital services under the closed management of epidemic situation, and holds that the university hospitals under the general management mode can upgrade their services in the aspects of special drug supplement and psychological classroom construction at first. Secondly, we can make service innovation by setting up an online communication platform-WeChat official account, cooperating with "online hospitals" for medical treatment and taking medicines offline, and setting up unmanned medicine cabinets, so as to define our own market position and give full play to the campus medical service function.

Keywords

The University Hospital; Service Upgrade; Closed-off Management.

1. Introduction

Non-medical university hospitals are public medical institutions invested by schools to serve the health of teachers and students[1]. According to the different management modes, it can be divided into the following three categories: directly affiliated units set up independently by universities, subordinate departments as logistics enterprises, and trusteeship departments handed over to social hospitals. The large hospitals in the world have the strength guarantee in qualification and level, and the hosted school hospitals have a wide service coverage, complete medicines and equipment; However, the school hospitals managed by universities and logistics enterprises are generally limited in scale, simple in service and only suitable for treating common diseases; Only a few school hospitals under the mode of school management and enterprise management have sufficient funds and complete medical equipment and medical conditions. This paper only analyzes and discusses the university hospitals under the mode of general school management and enterprise management (collectively referred to as general management mode).

2. The Relationship between the Closed Management of Epidemic Situation and the Service Innovation and Upgrading of School Hospitals

In February, 2020, novel coronavirus broke out for the first time in China. Wuhan was closed and schools were suspended. In June, 2020, the epidemic situation in the whole country was basically controlled, and the epidemic prevention work became normal. In September of the same year, colleges and universities in various places gradually resumed their studies. For a

period of time, the epidemic situation in the whole country was stable and college students were free to enter and leave. In the meantime, Under the general management mode, school hospitals have strengthened the prevention and management of infectious diseases, but basic services are still limited to common diseases and minor surgical injuries. In the face of special diseases that cannot be diagnosed and treated by school hospitals, students have the conditions to go to surrounding large hospitals for treatment, and the services of school hospitals are still in a state of balance with the market.

Since March, 2022, Omicron, a variant of Covid-19, has caused many outbreaks in China, and the new strains constantly mutated are highly contagious, and the vaccinated people can only reduce the possibility of partial infection. With the severe epidemic situation, colleges and universities all over the world have implemented closed management and strictly restricted students' access to the campus. Not only that, the new virus has strong concealment, The survival time on the surface of an object can be up to five days. With the news of positive environmental detection of SF Express in Hangzhou, Zhejiang Province and Yunda Express in Taiyuan, Shanxi Province, people are more alert to logistics products such as express delivery and take-out. Colleges and universities are crowded and have great potential risks, so they must resist virus invasion in all directions. Therefore, most colleges and universities require students to put an end to online shopping and take-out in an extraordinary period.

The epidemic situation in the whole country has not yet stabilized, and college students are basically in a state of "isolation". All daily necessities, food, clothing, housing and transportation depend on the service institutions on campus. In terms of medical services, school hospitals not only have to solve the problems of common diseases and injuries from falls, but also have to face the surge in service demand, the aggravation of work tasks and the difficulty of how to deal with special diseases. Colleges and universities are responsible for ensuring the physical and mental health of teachers and students, and medical service is very important in closed management. However, because of its small scale and few functions, school hospitals under the general management mode are increasingly difficult to meet the actual needs of teachers and students. Therefore, the upgrading and innovation of some university hospital services is necessary under the closed management system, It is the inevitable result of meeting the market demand.

3. The Service Upgrade of University Hospitals under Closed Management

At present, novel coronavirus in China is dominated by Omicron, but the strains are still constantly mutating, and a variety of recombinant Covid-19 appear. It is difficult to avoid the risk of no-one infection in various places. Colleges and universities should always pay attention to whether to extend the closed management time or prepare for the closed management at any time. Therefore, the function transformation of the school hospital has a tight time and a heavy task. First of all, we need to start with the existing services and upgrade them reasonably.

3.1. Supplement Special Drugs, Improve the Pharmacy

The routine drugs in general hospitals in colleges and universities involve upper respiratory tract infection, digestive system, surgery, dermatology, antibiotics and so on. Among them, people with upper respiratory tract infection are the most, and drugs such as compound paracetamol and amantadine tablets, compound licorice tablets and Ganmao Qingre granules are frequently used. Digestive diseases rank second, enteritis, gastritis, indigestion and so on are common[2]. The above-mentioned common diseases and frequently-occurring diseases in university hospitals have mastered the treatment methods, and their medicines are well stocked. However, some students suffer from special diseases, such as hereditary hypertension and lupus erythematosus, and they have their own medicines that need to be repurchased for

a long time. However, the types of drugs stored in ordinary school hospitals are limited, so they can't provide special drugs for this kind of students.

Faced with the above situation, some colleges and universities choose to let students go through the formalities of leaving school, and show their 48-hour nucleic acid test negative certificate when they return to school. Because the results of nucleic acid detection are not time-sensitive, and the results of a single test need a certain waiting time, it is common to choose to do nucleic acid first and then complete the planned tasks. It can be seen that students' action trajectory and contact with the crowd after leaving school are uncontrollable. Whether they are healthy and safe can't be proved by nucleic acid results. The decision of letting students go out of school to buy medicine by themselves not only increases the loss of money and time for students, but also brings potential harm to the management of epidemic situation on campus.

In order to avoid the unknown risks brought by students leaving school, school hospitals should take the initiative to supplement and improve the types of drugs. Through the intelligent form filling function of nailing software, forms are distributed to all students in the school every day. Students can choose whether to fill in or hand them in according to their actual needs. The school hospital can only view the details of the forms submitted voluntarily. The collected contents of the form mainly include the following two aspects:

Some students with special diseases who need to take fixed drugs for a long time, fill in the name of the drug in the form, and upload pictures and medical records of the drug. There are some limitations on the types of drugs that can be reimbursed by medical insurance for college students. It should be indicated in the form that the purchase price of special drugs cannot be generalized with the prices of other common drugs in school hospitals. This setting has been checked. In addition, students need to fill in important information such as name, class, student number, mobile phone number, etc., and promise to "declare and buy".

On the other hand, the form can collect the recent common diseases of students on campus. According to the background data, the school hospital will improve the types of drugs, sort out pharmacies, count the quantity and supplement them in time. Nail punching can increase customer participation, improve students' trust and acceptance of the school hospital, avoid the potential risk of infection caused by taking medicine out through the US Mission and hungry.

The hospital arranges the nail form data every 15 days, and dispatches staff to purchase special drugs and make up for common drug consumption on 15th and 30th of each month. Patients with special diseases should pay attention to time and apply in time. This work needs the cooperation of administrative staff at all levels, so that the drug collection work can be implemented and the information can be transmitted to every student in school.

3.2. To Carry out Psychological Classroom Activities

According to Zhang Baoping's research, it is found that the anxiety level of college students under the closed management of epidemic situation is significantly improved[3], The new type of coronary pneumonia is more contagious and more insidious. In the face of a large number of asymptomatic infected people, there is no immediate treatment. People's cognitive level of the virus is far less than its mutation rate. The inability of society to constantly defend against the virus has had a great negative impact on college students. Moreover, the closed management of colleges and universities causes students' outdoor social activities to be blocked, there is no normal entertainment consumption, psychological pressure gradually accumulates, and it is easy to produce problems such as anxiety and insomnia.

The purpose of hospital work is to ensure the physical and mental health of teachers and students. In the special period of closed management, students' mental health and physical health are equally important. In recent years, colleges and universities attach great importance to the investment and construction of students' mental health education, such as building a warm psychological consultation room and hiring professional psychological teachers. At

present, some achievements have been made in publicizing the knowledge of mental health and training class psychological committee members, but many measures require students to take the initiative to seek help in the psychological counseling room. The low willingness of college students to seek help from strangers makes it difficult to achieve better results in college psychological construction.

Under the closed management, students' negative emotions are aggravated. In order to give full play to the role of psychological teachers, university hospitals should turn passivity into initiative, and jointly launch psychological classroom activities for college students, that is, collective psychological classes should be conducted in class units. Although the number of professional psychological teachers in colleges and universities is limited, most counselors have basic knowledge of psychology. After special training, you can independently lead class students to carry out psychological counseling activities. After class, the recorded data will be handed over to the school hospital for analysis and retention. Professional psychological counselors are responsible for randomly selecting classes in each college to carry out psychological classes, and actively pulling in the distance with students through team games and fun games. Reduce the strangeness and vigilance of college students to the special status of "psychological teacher". Before the end of the activity, the psychology teacher can let nature take its course and leave your contact information. You are welcome to go to the consultation room to chat with yourself at any time.

Through the form of collective activities, we can go deep into the students' group to understand their mental state, and observe whether there are students who are unsociable and have negative emotions, so that we can focus on them in the future. After the epidemic is over, colleges and universities can stipulate that each class needs to have 1~2 psychological activity classes every semester. The monitor counts the free time to send email application, and the school hospital will reply after scheduling. Therefore, the mental health service of the school can be embodied, displayed through tangible activities, and all students can be led to participate in it.

4. The Service Innovation of University Hospitals under Closed Management

Before the outbreak of the epidemic, the general university hospital was an auxiliary role in treating students' minor illnesses and pains, and assisting social hospitals in finding patients in time. However, the sudden closed management makes the school hospital have to re-examine its own market position, take on the corporate responsibility at a special stage, and make use of limited resources to reform and innovate the shortcomings and defects. Play a leading role in medical treatment in colleges and universities.

4.1. Set up WeChat Official Account

During the epidemic-prone period, the tasks of university hospitals are heavy and there are many notices, so students need to pay attention to the latest news of university hospitals all the time. Therefore, it is essential to establish and improve online information transmission channels. Considering the cost of time, manpower and material resources, it is the best choice to build WeChat official account platform. By introducing the basic contents of the school hospital's working place, working hours, products and services through WeChat push, the information can be permanently retained and consulted at any time.

Omicron has strong concealment and long incubation period, so colleges and universities generally adopt high-frequency nucleic acid detection measures, and carry out batch sampling tests on school staff to ensure the safety of all teachers and students. The hospital can publish the time and place of weekly nucleic acid testing and the list of additional sampling personnel

through WeChat push, which not only completes the information transmission, It also recorded the implementation process of each epidemic prevention work.

WeChat platform in WeChat official account is the key channel to establish a good relationship between school hospitals and students. Apart from work notices, it can also publish daily tweets such as cleaning and nursing, medical knowledge, epidemic prevention and disinfection, etc. Closed management leads to the decrease of outdoor recreational activities of college students, the increase of time spent on electronic equipment, unhealthy and irregular life and rest, Colleges and universities can launch exercise videos to protect the eyes, shoulder circumference and spine in view of the phenomenon that college students sit for a long time, lie down for a long time and bow their heads for a long time. In addition, we can use WeChat push to emphasize the importance of ventilation and alcohol disinfection in bedrooms in special periods, and use video to teach necessary medical knowledge such as Heimlich first aid and ankle sprain first aid. Help students to avoid risks correctly in daily life.

4.2. Cooperate with Internet Hospital

Under the general management mode, the staff of university hospitals are limited, and usually each doctor has several departments, which leads to low professionalism of doctors and unclear diagnosis of complicated symptoms[4]. Under the closed management, the demand for medical resources on campus is urgent, and it is difficult to achieve self-study and improvement in a short time by employing many professional doctors or existing staff. To solve the above problems, university hospitals can choose to cooperate with "Internet hospitals" to develop the mode of online consultation and offline medicine taking.

In 2010, "Internet+medical care" began to sprout, and its development has reached a relatively stable level so far. Online consultation is an important supplement to offline hospitals and medical and health units at all levels. At present, the mainstream online consultation platforms include Good Doctor Online, Clove Doctor and Chunyu Doctor[5]. Colleges and universities set up an "Internet Hospital" account for students in schools. After logging in, students can consult online, and then go to the school hospital to get medicines according to the medicine receipts prescribed by online doctors. Medical staff should carefully check medicines, record students' identity information and establish a database.

4.3. The Establishment of Unmanned Medicine Cabine

Under the closed management of epidemic situation, it is difficult for college students to get in and out, and there are risks in online shopping and take-out behaviors. The medical needs of buying medicines and seeing a doctor can only depend on the service of the school hospital. Faced with the phenomenon of increasing workload and insufficient staffing, but the shortage of medical human resources in the whole society, university hospitals should find another way to rationally divide the work levels, Use vending machines to complete basic tasks.

Vending machine is a kind of commercial automation equipment, which provides vending operations without manual assistance. The control system has the functions of automatic monitoring, refrigeration, product delivery, payment and alarm. Colleges and universities can use this equipment to sell unmanned drugs, mainly involving surgical drugs and some over-the-counter drugs. For example, iodophor, Yunnan Baiyao aerosol, watermelon frost, Jianwei Xiaoshi tablets, etc. The refrigeration function of vending machines can provide conditions for the storage of medicines. Using the self-service machine of drug purchase can not only share the basic workload of medical staff in colleges and universities, reduce the pressure of doctors on duty 24 hours a day, but also avoid the risk of personnel gathering and cross infection.

The vending machine is equipped with Wi-Fi and GPRS inside the machine, which can collect inventory level data and send it to a centralized database to make a replenishment plan[6]. University hospitals can supplement drugs in time according to the system prompts.

Students can enter the self-service drug sales program by scanning the electronic QR code, and can use it after completing the information such as name, student number, mobile phone number, and class belonging to the college.

5. Conclusion

Closed management has brought challenges and opportunities for the development of university hospitals in the general mode. Facing the unstable domestic epidemic situation and the severe global epidemic situation, university hospitals should always be ready to fight the epidemic situation. According to the national epidemic prevention policy and the changes of medical needs of teachers and students in schools, the existing services should be upgraded and innovated in time. In the future, there will be a series of effective measures to deal with other types of infectious diseases, which will reduce the pressure of medical and health units at all levels in the country and provide a solid guarantee for teachers and students on campus.

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