EVALUATION OF SAFETY AND HEALTH IMPROVEMENT IN POPULATION BY THE IMPLEMENTATION STRATEGY OF CHINA GOVERNMENT DURING COVID-19 PANDEMIC

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Evaluation of Safety and Health Improvement in Population by The Implementation Strategy of China Government during Covid-19 Pandemic

Abstract

Confirmed case of COVID-19 gradually appeared all over the world as the first case of COVID-19 was diagnosed and COVID-19 has begun to become uncontrollable in 2020. As the first discovered and hardest hit area in China, the epidemic was effectively controlled within three months. Therefore, this study conducted investigations in three cities in China, Wuhan, Beijing and Yinchuan, in order to obtain relevant policies for epidemic control and effects of people during epidemic. This research provides a template for epidemic prevention and control for other hard-hit countries. This study collected government policy data and compared and analyzed 186 questionnaire surveys in the three cities to find out how to implement different policy in different regions can effectively control COVID-19. Through the collection of policy data, it is found that the Chinese government is more inclined to reduce the spread of the epidemic and solve the problem of material shortages in the hardest-hit areas. For low-risk areas, the government pays more attention to how to reduce foreign infections, increase the cure rate, and establish relevant responsible persons. Through survey data analysis, it is found that the mental health of more than 70% of people is affected. Enhancing knowledge of people of the hazards of COVID-19 will increase satisfaction with epidemic prevention and control, and people will be more willing to comply with relevant epidemic prevention regulations. Therefore, timely provision of adequate supplies and personnel to the hardest-hit areas will reduce their medical pressure, and effective travel control will reduce the risk of transmission from the source. Establishing responsible persons and raising awareness of epidemic prevention in low-risk areas can reduce human-to-human transmission and

reduce personnel violations of epidemic prevention regulations. Online psychological assistance from hospitals and governments can reduce people's mental health problems.

Keywords: COVID-19, government, survey, policy, epidemic control.

UNINGIA

PENILAIAN PENINGKATAN KESELAMATAN DAN KESIHATAN DALAM PENDUDUK DENGAN STRATEGI PELAKSANAAN PEMERINTAH CHINA SEMASA PANDEMIK COVID-19

ABSTRAK

Kes Covid-19 yang disahkan muncul secara pesat di seluruh dunia dengan kes pertama Covid-19 didiagnosis pada tahun 2020 dan telah mula menjadi tidak terkawal. China merupakan kawasan yang pertama kali ditemui dan paling teruk dilanda Covid-19, tetapi wabak ini dapat dikawal dengan berkesan dalam masa tiga bulan. Oleh itu, kajian ini menjalankan penyelidikan di tiga bandar di China, Wuhan, Beijing dan Yinchuan, untuk mengenalpasti polisi yang relevan untuk kawalan wabak dan kesannya terhadap penduduk semasa wabak. Penyelidikan ini turut membincangkan pencegahan dan kawalan wabak bagi negara-negara lain yang dilanda masalah. Kajian ini mengumpulkan data dasar-dasar kerajaan, membandingkan dan menganalisis 186 kajian soal selidik di ketiga-tiga bandar untuk mengetahui bagaimana perlaksanaan dasar di wilayah yang berbeza dapat mengawal Covid-19 dengan berkesan. Melalui pengumpulan data polisi, didapati bahawa kerajaan China cenderung untuk mengurangkan penyebaran wabak ini dan menyelesaikan masalah kekurangan bahan di kawasan yang paling teruk dilanda. Bagi daerah yang berisiko rendah, kerajaan China lebih mengambil pendekatan pada cara mengurangi jangkitan asing, meningkatkan kadar penyembuhan, dan menetapkan orang yang bertanggungjawab. Melalui analisis data kajian soal selidik, didapati bahawa kesihatan mental bagi lebih daripada 70% penduduk terjejas. Dengan peningkatan pengetahuan tentang bahaya Covid-19 akan meningkatkan kepuasan terhadap pencegahan dan kawalan wabak, dan penduduk akan lebih bersedia untuk mematuhi peraturan pencegahan wabak yang berkaitan. Oleh yang demikian, penyediaan bekalan

dan peralatan peribadi yang mencukupi dan tepat pada masanya ke kawasan yang teruk akan mengurangkan tekanan perubatan, dan kawalan perjalanan yang berkesan akan mengurangkan risiko penularan wabak dari sumbernya. Dengan menetapkan orang yang bertanggungjawab dan meningkatkan kesedaran mengenai pencegahan wabak di kawasan berisiko rendah dapat mengurangkan penularan manusia ke manusia dan mengurangkan pelanggaran peraturan pencegahan wabak di peringkat individu. Bantuan psikologi dalam talian dari hospital dan kerajaan juga dapat mengurangkan masalah kesihatan mental bagi penduduk.

Kata kunci: Covid-19, kerajaan, kajian, polisi, kawalan wabak.

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1. BACKGROUND OF STUDY

Covid-19 refers to pneumonia caused by the 2019 new Coronavirus infection. Coronavirus is a large virus family that is known to cause colds and more serious diseases such as Middle East Respiratory Syndrome (MERS) and severe acute respiratory syndrome (SARS). Since December 2019, some hospitals in Wuhan City, Hubei Province have successively discovered multiple cases of unexplained pneumonia with a history of exposure to the South China Seafood Market, which were confirmed to be acute respiratory infectious diseases caused by the 2019 new Coronavirus infection. Symptoms of infection include fever, chills, cough, rhinitis, sore throat, difficulty breathing, myalgia, nausea, vomiting and diarrhea (Li et al, 2020). Older men with comorbidities are more likely to be infected and have a worse prognosis. In severe cases, it may cause heart damage, respiratory failure, acute respiratory distress syndrome and death. (Wang et al, 2020) Since February 2020, Covid-19 has developed into a global topic. As of April 17, 2021, the number of infections worldwide has exceeded 140 million, and the death toll has exceeded 3 million. Up to now, the epidemic situation in most countries has not shown signs of remission, such as: Malaysia, India and the United States.

As of June 9, 2021, the total number of COVID-19 infections in the United States has reached 33.4 million, the death toll has reached 598,000, and the daily increase in population is still more than 10,000 (Worldometer, 2021). The number of infections in Malaysia reached 628,000 and the death toll reached 3,536. Despite the outbreak of the

epidemic, Malaysia immediately implemented a publicity policy to increase the number of people by no more than 100. After September 2020, the number of new epidemics in Malaysia has rapidly increased to 1,000, or even more than 5,000. In the early days of covid-19, China was the worst-hit region in the world. From January 11 to February 17, the number of people affected by the epidemic in China increased from 33 to 58097. But by April 20, the number of existing confirmed diagnoses dropped to 1,630. Since May, the number of confirmed cases of the epidemic in China has remained at 200-1000 (Worldometer, 2021). Although the number of confirmed cases in China is relatively high in terms of data, China has more than 1.3 billion people. Therefore, it only took 4 months for China to transform from the worst-hit area to one of the safer countries. The number of people infected in China can change from a rapid increase to a gradual decrease in a short period of time. Government policies and residents' response methods play an extremely important role.

The new Coronavirus is raging in Europe and the United States, the number of confirmed cases in China is declining, and the peak of the epidemic in China has passed. The epidemic was temporarily successfully contained, and China's practice has also been affirmed by the World Health Organization. Therefore, this study will be conducted in three different cities in China: Wuhan, Beijing, and Yinchuan to investigate and compare the response measures and policies at different stages of the relevant epidemic; analyze and summarize the spontaneous behavior and voluntary organizations of Chinese residents during the epidemic; Residents of three cities conducted questionnaire surveys and analysis on policy satisfaction and psychological problems. Finally, through data collection, comparison, analysis and research, how to implement appropriate policies and protective measures while satisfying the residents and voluntarily.

The importance of this project is to study how the Chinese government and people are actively responding to the epidemic, so that China, with a large population, has become one of the safest countries in the world from the earliest hardest-hit area in the short term. Policies and residents' response measures are a typical example that can provide a reference for other areas hardest hit by the epidemic. Therefore, this study will analyze and summarize relevant policies. Additionally, the project will survey three typical cities. Wuhan city where cardiogenic pneumonia was first discovered. Beijing, the capital of China, is also a financial center. Yinchuan City, there were no new cases for more than 400 days. And the response measures taken by the government and residents to safety and health during this period. Finally, summarize and discuss based on the results of the investigation and analysis.

2. OBJECTIVES

1) To investigate COVID-19 response measures and policies in three different cities in China.

2) To analyze the spontaneous behavior of Chinese residents and communities during the epidemic through questionnaire surveys.

3) To determine how to implement corresponding epidemic-related measures in areas with different epidemic levels.

3. RESEARCH SCOPE

This research will analyze three different cities in China.

Wuhan: is the political, economic, financial, commercial, logistics, technology, cultural, and educational center and transportation and communication hub in central China. It has a total area of 8569.15 square kilometers and a population of 11.08 million. The areas where COVID-19 was first detected and most severely affected in the early stage. Therefore, studying how the Wuhan government and residents respond to the rapidly growing epidemic will provide help for the current global epidemic and future emergencies. (Xinhua, 2019)

Beijing: It is the capital of China, China's political center, cultural center, and international exchange center. It has a total area of 16,410.54 square kilometers and a

permanent population of 21,893,100. Therefore, as a central city in China, the relevant policies of the epidemic and the response level of residents are very important for this study. (Cox, 2018)

Yinchuan: It is the capital of Ningxia Hui Autonomous Region and an important central city in Northwest China identified by China. It has a total area of 9025.38 square kilometers and a population of 2,859,074 people. The number of people infected in Yinchuan in the early stage of the epidemic was only 34 and there has been no new epidemic for more than a year. Therefore, how Yinchuan quickly responded after discovering new epidemics is also a typical example in this study. (Cox, 2018)

4.0 LITERATURE REVIEW

4.1 Treatment of Mental Illness and Its Impact on COVID-19 Prevention Regulations

4.1.1 The Impact of Mental Health on Compliance With SOP of COVID-19

The report by Shuai Liu pointed out that during the COVID-19 epidemic, the number of confirmed cases and deaths increased, and residents and medical workers experienced psychological problems of anxiety, depression and stress.(Liu et al, 2020) Therefore, on January 26, the government urgently established a psychological assistance hotline. Through 72 surveys of health and 1563 medical staff, it was found that depression, anxiety, insomnia and stress generally increased. In the end, universities, medical institutions and mental health personnel in 31 provinces in China provided free 24-hour online consultation services. Health workers have also developed online mental health treatments, and search websites and shopping software can intervene and treat them based on user searches for relevant content.

The increase in depression and irritability among residents and medical staff has affected their satisfaction with the implementation of the COVID-19 policy and increased the number of violations of the SOP of COVID-19. Therefore, active and effective psychological counseling and treatment can reduce the risk of mental illness, improve the satisfaction of residents, and strengthen the compliance of the staff to the SOP.

4.1.2 Telemedicine Reduce Cost of Treatment and Risk of Infection for Patients With Mental Illness

Through research by Monaghesh (Monaghesh& Hajizadeh, 2020), we know that telemedicine has played an important role in alleviating the epidemic in China. The purpose of the research is to study the role of telemedicine services in the prevention, diagnosis, treatment and control of diseases during COVID-19. In the study, the author mentioned that in order to reduce contact sexual transmission, the elderly, ordinary patients, and patients with mental illnesses can provide remote advice and treatment services through mobile phones, computers and other electronic devices. This behavior can effectively reduce the use of medical resources and reduce the spread of COVID-19 caused by direct contact with patients. At the same time, the treatment cost is reduced

and the patient's dynamics can be understood in real time. In this study, five different databases, such as PubMed, Scopus, Embase, Web of Science, and Science Direc, analyzed and summarized medical data. Then, data extraction and research are carried out on different related documents. Finally, the quality classification of the research of different documents is carried out.

After research, it is found that telemedicine can be widely used in central and private hospitals. It also opened up the distance between medical staff and patients, reduced the spread of the disease and reduced the morbidity and mortality during the COVID-19 pandemic. At the same time, medical decisions can be made quickly, such as the second opinion of patients and cross-border medical exchanges. However, this system review has limitations, such as the lack of data caused by the prohibition of access to the database and the large amount of data that cannot fully cover the world, which affects the data results.

4.1.3 The Impact of Increased Negative Emotions on Life Satisfaction

Literature of Liu mentions that the potential threat of COVID-19 directly affects people's positive or negative emotions. Excessive or long-term negative emotions will not only reduce people's immune function, but also affect people's compliance and satisfaction with epidemic prevention measures. In this study, the original database of Weibo was analyzed, which contained 1.16 million active users. Through analysis, it is found that since the epidemic began on January 20, people have begun to reduce their outings and activities, causing mental discomfort. After the death cases appeared, people gradually became nervous and anxious. At the same time, there were problems with false information on the Internet and government supervision actions, and people began to become more angry and less satisfied with their lives. During this period, dissatisfaction caused people to continue to violate epidemic prevention and control measures.

4.2 The Response of Chinese During COVID-19 in 2020

4.2.1 Public Health Intervention

The research report by Pan analyzes the impact of the epidemic through Wuhan's policies. (Pan et al, 2020) This article analyzes the 32583 confirmed cases in Wuhan at different ages, genders and 5 time periods. In the end, it was found that the elderly and children are more likely to be transmitted. Although women have a higher proportion of the disease than men, the risk ratio of men is higher than that of women. More importantly, as shown in Figure 4.1 below, the hospital did not realize the severity of COVID-19 until the second period (at this time the number of infections has increased rapidly). In the third phase, the government immediately implemented urban blockade, social isolation, home quarantine and centralized quarantine policies. Although there was a short-term increase in the number of infections after the implementation of the policy, the number of newly diagnosed patients began to drop sharply after February 2.



Figure 4.1 Changes in the number of new epidemics in five different stages.

Therefore, through the analysis of this document, it is concluded that too strict policies may have an impact on the economy, but they will quickly reduce the severity of the epidemic.

4.2.2 Control of Floating Populations

In literature by Xu, the author tracked the epidemic data from the official Chinese website every day from January 11, 2020 to June 6, 2020. These include: policies and measures implemented by the government, and statistics on related cases. Then collect and analyze the data. (Xu et al. 2020)

The article pointed out that in the first few days, the government strengthened surveillance, isolation, disinfection, increased civic awareness, exchanges with other countries, conducted RNA sequencing and established shared PCR monitoring reagents. During these five months, the government made 7 revisions to the diagnosis and management of COVID-19. As of January 27, 18 cities across the country have been locked down, and 24-hour closed community management has been carried out. The daily necessities are provided uniformly by the government. The community implements strict policies such as temperature measurement, personnel tracking, and family isolation. And the government strictly prohibits any gatherings, work and school activities. All Chinese group tours are suspended, and all forms of examinations, training and teaching are conducted online. And regularly disinfect public places and streets. The government used 14 days to establish two large medical institutions ("Vulcan Mountain" and "Thunder Mountain") and put them into use in early February. The government urged state enterprises to return to work on January 22. On February 22, the supply of N95 masks in Hubei Province alone increased from 36,000 to 300,000 per day. On April 1, the China Foundation received more than 2.1 billion yuan in donations, and the government allocated 1,140.8 billion yuan. Finally, at the end of March, China overcame the difficult period of the sub-epidemic.

Therefore, China's practices (involving active case surveillance, rapid case diagnosis and quarantine, strict follow-up and quarantine of close contacts, and issuing guidance to help the public understand and comply with control measures), as well as rapid and effective high-level policy decisions, are fully activated The public health system, as well as the full participation of society, are effective in preventing and controlling COVID-19.

4.2.3 Responses, Challenges and Implications for Health System

Similarly, literature by Xing expresses similar views as Xu, but Xing added that in the first three weeks of January 2020, there were only dozens of confirmed cases, but the relevant government personnel and medical staff underestimated the risk of transmission and Withholding the news, the situation in Wuhan was completely out of control. Although the government immediately implemented countermeasures, if early recognition of the severity of COVID-19 and early disclosure of information will enable Wuhan to have sufficient capacity to stop the spread of the epidemic in the initial stage. At the same time, in the early stages of the pandemic, many countries underestimated the severity of the epidemic and related benefits in order to consider human rights, and failed to achieve effective prevention and control, leading to the rapid spread of the disease.

4.2.4 Public Participation During the COVID-19 Outbreak

literature by chen mentioned that Chinese social media has more than 430 million monthly active users on Sina Weibo and more than 1 billion active users on WeChat. Therefore, social activities, media information Through these social media, residents began to convince children and parents how to reduce the risk of virus infection through hand washing, disinfection and masks. The disaster area was open to accommodation for free, and the Chinese people began to organize voluntary donations and set up volunteer associations. Medical workers on vacation apply for returning to their posts voluntarily, and infrastructure workers independently contribute to the construction of "Vulcan Mountain" and "Thunder Mountain". Residents supervise each other and share information resources. (Chen, 2020) The report by Wu surveyed 19,816 data and found that Chinese citizens generally have a high degree of satisfaction with government policies, but as their satisfaction with the government decreases, such satisfaction will decline. (Wu et al, 2021)

Therefore, China's success in resisting the epidemic is attributable to both the government's response policy and the voluntary behavior of residents. Although the epidemic is not a war, no one can survive alone.

4.3 Literature Findings

The literature shows that although the government mandatory policy measures are too strict, they have played an important role in controlling the epidemic. The rapid implementation of corresponding policies can effectively reduce the spread of the epidemic and quickly reduce the number of newly diagnosed people. At the same time, residents' spontaneous response to the epidemic also played an important role. However, in the process of literature analysis, it was found that most of the literature's analysis of China's policies was partial and comprehensive, and did not analyze the epidemic management strategies implemented in different regions. Secondly, there is insufficient research on the voluntary behavior of residents. Insufficient information on different response policies in different cities.

5. METHODOLOGY

5.1 China Government Policy Summary and Analysis

Analyze and summarize the policy documents implemented by China during the epidemic; collect relevant policy data on the control of COVID-19 in Wuhan, Beijing and Yinchuan on the official website of the Chinese government; summarize how the Chinese government has responded to different areas with severe epidemics.

5.2 Questionnaire Development and Analysis

A questionnaire surveys will be conducted among residents of three different cities in China: Yinchuan, Wuhan and Beijing, with 62 surveys used in each city. This questionnaire survey will use Tencent questionnaires for random sampling. Tencent's social software has more than 1 billion users in China, and its questionnaires can be randomly placed in selected cities. The content of the questionnaire will include: how did the residents respond to COVID-19 during the epidemic in China; what voluntary behaviors did the residents have during the epidemic; how to solve life, mental, and disease problems during the isolation period; and the residents' satisfaction with the community and their mental health Influence.

After collecting the questionnaire, analyze the data by chart. Then, study the differentiation of residents in different cities at different stages of the epidemic, and collect relevant suggestions and evaluations.

5.3 Determine Measures to Be Implemented in Different Regions

Through the analysis of the epidemic policy and questionnaire survey, it is determined how to implement relevant epidemic prevention measures in different regions on the premise of reducing health problems and improving satisfaction of people.

6. RESULT AND DISCUSSION

6.1 Government Measures in Wuhan

In the early stage of the Wuhan epidemic, prevention and control headquarters and community work departments were quickly established, and civil affairs system investigators were assigned to the city headquarters to assist in the work, and five people were assigned to participate in community work and organize work. At the same time, the prevention and control of the local epidemic in Wuhan was carried out. On January 21, the Prevention and Control Headquarters launched epidemic prevention and control work, including elderly care services, funeral services, homeless assistance, and child welfare. Additionally, the Chinese government has proposed the following three strategies to make a great contribution to the control of the epidemic. (Zhang &Gao, 2021)

1) Prevention: The Chinese government implements two strategies, namely "putting people's lives and health in the first place" and "taking epidemic prevention and control as the most important work at present". Therefore, in order to fully implement this strategy, the Chinese government established a steering group on January 27 and carried out guidance on epidemic prevention and control in Hubei. These include: closing the Lihan channel to prevent the epidemic from spreading across the country; closing communities and cutting off the channels of transmission. Government officials and Chinese enterprise management take the lead in entering communities with severe epidemics to monitor the prevention and control of the epidemic, and all communities are managed in a closed manner. Only one entrance and exit is reserved for a community. The old community and the open residential area are separated by hard fences and completed on February 14. The entrances and exits of the community are guarded, disinfected, and inspected 24 hours a day. (Zhang et al. 2020)

2) Governance: scientific prevention and treatment highlight the concept of life first. Due to the concealment, long incubation period, and rapid spread of COVID-19, coupled with the alternating winter and spring during the epidemic, crowdedness and cross-infection, the control and treatment of COVID-19 have become difficult and expensive. Therefore, increasing the admission rate and cure rate, and reducing the infection rate and death rate are the top priorities for winning the battle against the Wuhan epidemic. In the end, the government implemented the strategy of "concentrating patients, experts, resources, and treatment". The number of designated hospitals increased from 3 to 48, and the design and construction of Huoshenshan and Leishenshan hospitals were accelerated on

January 23, 2020. The Huoshenshan Hospital, which can accommodate 813 beds, was completed and put into use in 10 days. (Wan, 2021)

3) Aid: After the outbreak, members of the Chinese New Coronary Pneumonia Medical Treatment Expert Team arrived in Wuhan as soon as possible to guide the standardized diagnosis and treatment of severe cases. At the beginning of the epidemic in 2020, the number of confirmed cases in Hubei continued to increase, and beds, medical care, equipment, and materials were in short supply. Take protective clothing as an example: all medical protective clothing reserves across the country cannot meet the needs of Wuhan for a day. On January 21, 19,000 protective suits and 19,000 protective suits provided by the Chinese government and other provinces arrived in Wuhan via train Z285. On January 21st, nine batches of anti-epidemic materials arrived throughout the day, including medicines, medical equipment, masks, etc., totaling nearly 33 tons. Lian Weiliang, the central steering group, declared that through the joint efforts of the people across the country, the current shortage of medical supplies has been greatly improved. The next overall consideration is to 'increase the quantity, ensure the quality, speed up the distribution of epidemic prevention materials and increase the number of medical personnel.' On January 24, the first batch of 136 members of the Shanghai medical team assembled at Shanghai Hongqiao Airport to fly to Wuhan and the hospital began to receive a large number of confirmed patients. The Chinese government organized 19 provinces and cities to support Hubei Province.

On January 25th, 10% of medical staff across the country have assembled in Wuhan, reaching 11,000 people to rescue critically ill and critically ill patients. (Mo et al, 2020)

6.2 Government Measures in Beijing

The CDC stated that the confirmed cases in Beijing are mainly imported cases. At the beginning of the epidemic, the sample size in Beijing was too small, and the biological characteristics of the virus and the transmission capacity of the pathogen need to be supported by corresponding clear data before it can be estimated. Therefore, the Beijing government advocates that disadvantaged people should try to avoid going to crowded public places. At the same time, it is necessary to ensure indoor air circulation in homes and public places. The public should pay attention to personal hygiene, wash their hands frequently, and reduce or avoid crowded places. If fever or respiratory infection occurs, contact the community health institution, or go to the fever clinic of the nearest medical institution for treatment. (Government, 2021)

Medical staff must do a good job in prevention and control. Simultaneously, medical staff belonged to standard prevention, that is, primary protection. Medical staff wear work clothes, isolation gowns, work caps and surgical masks. However, after receiving suspected cases, medical institutions upgraded their protection from primary protection to secondary protection. Medical personnel should wear medical protective clothing, medical protective masks, protective goggles or face masks, medical latex gloves,

protective shoes, work caps, etc. The Beijing Municipal Health Commission mentioned the need to strengthen prevention and control work, and Beijing conducts comprehensive talent training for medical staff in designated hospitals. In accordance with the strategies of early detection, early isolation, and early treatment, medical and health institutions in Beijing have strengthened the pre-examination, triage and investigation of cases of pneumonia of unknown cause. At the same time, strengthen laboratory testing, discovery, reporting and reporting capabilities to strictly prevent imported cases. Prevention and control measures in place will block the spread of super spreaders', who are more likely to infect others than normal carriers, leading to a largescale outbreak of the epidemic. Vulnerable groups, if cases are detected in time and the source of infection is isolated, then the phenomenon of super transmission may be blocked by prevention and control measures. (Wang et al, 2020)

Beijing has established a leading group for epidemic prevention and control, including 7 groups including medical insurance, transportation security, commodity supply, service guarantee for major events, response to public opinion, social stability, and university work. Work scheduling meetings are held every day to study and judge the epidemic, coordinate various districts and departments, and form a joint force for prevention and control. Beijing supervised and inspected the implementation of prevention and control measures in medical institutions in the city, and carried out a total of nearly 7,000 times; timely released the list of 89 medical institutions with fever clinics and treatment guidelines for fever patients in the city to guide fever patients to

seek medical treatment in a standardized and orderly manner, and reduce crossover Infection; fully guarantee the market supply of protective equipment such as masks and disinfectants. (Wu et al, 2020)

6.3 Government measures in Yinchuan epidemic

1. Strengthen personnel health monitoring

(1) Personnel flow management: Each company must master the flow of employees, carry out epidemic prevention management by region and category according to requirements, and conduct home or centralized isolation health observation for people from severely epidemic areas for 14 days. After the body temperature is normal, there are no symptoms of discomfort, and the quarantine can be cancelled only after passing relevant certificates.

(2) Implement health report. Each company sets up a suspicious symptom reporting phone. When employees have fever or respiratory symptoms, they need to report to the unit. All units shall summarize the health status of employees every day, report abnormal situations to health and other departments in a timely manner, and take corresponding prevention and control measures.

2. Strengthen prevention and control of office premises

(1) Strengthen personnel registration management. The fingerprint attendance machine is temporarily disabled, and personnel attendance can be checked in other ways, such as facial recognition. Every time you enter the office area, you have to take a temperature check at the entrance. Only enter with normal body temperature (below 37.3°C). Non-workers are not allowed to enter the office area. If it is confirmed that it is necessary to enter the area, the company should ask the visitor's source, work unit and personnel in contact with the epidemic area, and truthfully report to the Security Office of the Administrative Center. The security department registers, visitors take the initiative to take the temperature measurement at each office area, and only those who meet the requirements can enter.

(2) Reduce personnel gatherings and collective activities. Line up the stairs in an orderly manner, maintain proper spacing, and refrain from talking with others when smoking. Wear masks throughout the elevator to reduce the number of meetings. According to the actual situation, you can go to work at the wrong time, flexible working system or work from home.

(3) Strengthen group meal management. The management center uniformly uses disposable lunch boxes. All units implement staggered dining and may not gather for dining in their respective offices.

3. Strengthen personal protection guidance

(1) Strengthen prevention and control publicity and education. Strengthen the popularization of epidemic prevention and control knowledge, let the masses fully understand the prevention and control knowledge, grasp the key points of protection, increase protection awareness, and actively cooperate with the prevention and control work.

(2) Implement personal protection requirements. People must wear masks correctly when traveling to avoid crowds, especially in places with poor air flow. If you need to take public transportation, you must wear a mask all the way, and try not to touch the objects on the car with your hands. In densely populated areas, protective clothing such as respirators should be worn. Keep a safe distance from others and develop the habit of washing hands frequently. Adhere to hand hygiene protection before and after work, before eating, after going to the toilet, before and after removing the mask, and cover with tissues, handkerchiefs and sleeves when sneezing or coughing. Promote healthy lifestyles such as reasonable diet, moderate exercise, regular work and rest.

4. Strengthen the handling of abnormal situations

(1) Clarify prevention and control responsibilities. Establish internal epidemic prevention and control organizations for enterprises and communities, clarify emergency measures and handling procedures for epidemic prevention and control, and assign prevention and control responsibilities to departments and individuals.

(2) Set up an isolated observation area. Communities and enterprises should set up temporary isolation sites and facilities, and arrange relatively independent rooms as temporary isolation sites for suspected persons. People who have gone out or have people from other provinces at home and have abnormal physical symptoms such as fever, cough, sputum expectoration, difficulty breathing, breathing pain, rapid heartbeat, sudden deterioration of the condition, chills, etc., need to go to the centralized isolation area for temporary isolation and report to the health and other departments. Dispose of according to relevant regulations.

(3) Enclose and disinfect the relevant areas. People with suspicious symptoms should be immediately isolated from their work posts and dormitories. Take preventive and control measures against close contacts based on medical observations.

6.4 Result of Survey

The basic information of the subjects is shown in Table 7.1:

Classification	Choices	Wuhan (%)	Beijing (%)	Yinchuan (%)
Gender	Man	45.16%	45.16%	46.8%
	woman	54.84%	54.84%	53.2%
Age	18 or less	24.19%	19.35%	12.9%
	19-50	67.74%	74.19%	82.3%
	51 or more	8.06%	6.45%	6.5%
Occupation	student	32.26%	30.65%	33.9%
	Medical staff	25.81%	37.10%	35.5%
	Teacher	19.35%	19.35%	17.7%
	Freelancer	19.35%	9.68%	9.7%
	Others	3.23%	3.23%	4.8%
Volunteer	Yes	80.65%	85.48%	80.6%
	No	17.74%	14.52%	19.4%

Table 7.1 Basic information of subjects

The questionnaires were conducted in 62 surveys in Wuhan, Beijing and Yinchuan, totaling 186. According to Table 7.1, there is little difference in the proportion of people who received the questionnaire this time. For example, in the three cities, the proportion of men who accepted the questionnaire was 45.16% to 46.8%, and the proportion of medical staff ranged from 25.8% to 27.1%. From the perspective of whether they have been a volunteer, more than 80.65% of the people mentioned that they have been a volunteer, and only a few subjects did not. Therefore, the results of this questionnaire survey in the three cities are comparable.



Figure 7.1 Voluntary behavior of participation

Participating in the volunteer behavior survey results show that most people in this city have done volunteer behavior. Among them, the proportions of spontaneously organizing online entertainment activities and helping neighbors to buy things are relatively small and similar in number, ranging from 25.8% to 38.71%. The number of volunteers in hospitals, communities, or neighborhoods in Beijing is higher than the other two cities, reaching 62.9%, but the number of people providing help for the elderly and children is 32.6%, which is nearly 30% lower than the other two cities.



Figure 7.2 Impact of the epidemic

Figure 7.2 illustrate that Yinchuan people are generally more affected by the epidemic than the other two cities. Among them, the proportion of people worried about the epidemic and thinking that the original plan has been disrupted has reached more than 70%. Yinchuan has affected the most as the city with the lowest infection rate among the three cities, has suffered the most. According to the feedback from the interviewees, although Yinchuan is relatively safe, the control of the epidemic is too strict, causing people to be troubled. Nearly half of the people in the three cities in the questionnaire are worried that the epidemic will affect their health. Few people in Wuhan and Beijing mentioned that the epidemic has caused trouble to work and study.



Figure 7.3 Community epidemic prevention measures

In Wuhan, Beijing and Yinchuan, most communities have generally publicized knowledge about epidemic prevention. Nearly half of the communities have carried out the control of travel and entering the community, and they are not allowed to enter and exit at will when it is not necessary. Among them, the proportion of Yinchuan controlled communities is relatively small, at 42%.



Figure 7.4 Satisfaction with community measures

The above figure shows that the people in the three cities are relatively satisfied with the community management and control measures, with more than 90% of the number of people giving a score of 60 or more. Only a few people are dissatisfied with the community. Among them, Yinchuan's satisfaction score is lower than that of the other two cities.



Figure 7.5 The impact of the epidemic on mental state

In this 186-questionnaire survey, people generally expressed that they have become more lazy, depressed and irritable because of COVID-19 at home. However, 19.35% of people mentioned they became more energetic than before.

6.5 Discussion

According to the above-mentioned Wuhan, Beijing and Yinchuan response policies for COVID-19, it can be found that each city's focus on the epidemic is different. As a discovery area and a hard-hit area, Wuhan focuses on how to prevent, treat, and provide adequate medical equipment and medical staff. In order to effectively interrupt the spread of the epidemic, the community has been closed and managed for 24 hours, strengthened personnel control, investigation, and large-scale disinfection in the city. For better treatment and adequate medical facilities, the hospital gathers medical experts from all over the country for frequent meetings and speeds up the construction of new medical institutions. In order to allocate sufficient medical staff and antiepidemic materials, governments and people in other regions have spontaneously provided resources and allocated medical staff.

As the capital of China, Beijing focuses on strengthening the investigation and treatment of migrants. Conduct large-scale inspections and management of communities and hospitals. As a low-risk city, Yinchuan has a zero infection rate for up to one year during the epidemic, and still has very strict epidemic control and control. Whether it is the isolation of outsiders or the inspection of masks and body temperature, the strictness is not lower than that of other areas. In addition, Yinchuan has a clear responsibility system. When there is an increase in epidemics, the responsible persons will be punished.

In this questionnaire survey, most people said that they have volunteer experience and actively contribute to hospitals, streets and communities. There have been no new confirmed cases of COVID-19 in Yinchuan for a year, but strict control measures have brought people lower satisfaction. Excessive treatment of the epidemic control and control has brought the people of Yinchuan worry about the epidemic and their own health. And in the questionnaire, it was found that more than 70% of people have affected their mental health due to COVID-19.

7. CONCLUSION

The review of migrants and strict management of migrants in the hardest-hit areas will interrupt the spread of the epidemic from the source. The timely support of materials and personnel in the hardest-hit areas from other regions will effectively alleviate the medical pressure in the region. Whether it is to set up a person in charge of the government or community personnel, the implementation of epidemic control will become smoother and more effective, because this strategy will reduce the spread of the epidemic caused by negligence or lax inspections. Support, review and management of the hardest-hit areas will reduce the spread of COVID-19. Propagating the severity of COVID-19 and prevention methods in areas with low epidemics will reduce the spread between people and increase people's awareness of prevention. Communities and hospitals conduct irregular COVID-19 tests on people, which will reduce the risk of missed inspections and hidden transmission. Regular disinfection of streets and communities reduces the risk of airborne transmission.

Through the analysis of the questionnaire survey, strict travel control will affect people's mental health, so community organization of online entertainment activities will become indispensable. The implementation of telephone or Internet psychological assistance by hospitals and governments will reduce people's mental health problems. Increasing people's attention to COVID-19 can reduce people's dissatisfaction with the government and the community, thereby making people more willing to abide by the corresponding rules and regulations.

8. RECOMMENDATIONS

This data collection and questionnaire survey are restrictive. China has a strict review of data and words used on the Internet. Therefore, a lot of files are confidential and cannot be viewed., and it cannot pass the review on issues related to policy satisfaction. Therefore, a complete policy document related to epidemic prevention and control is provided due to consultations with the government when investigating in China. This questionnaire should not be limited to China, and other countries should be selected for comparison, so as to improve reliability and comparison.

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