

# The Awareness and Response of the Elderly in China about the New Crown Pneumonia Epidemic

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## Abstract

In the context of the global epidemic of new crown pneumonia worldwide, China has achieved very ideal results in epidemic prevention and control, effectively controlled the outbreak of the epidemic, and protected the life safety of the people, which is closely related to the continuous improvement of national epidemic awareness and prevention and control response capabilities. With the serious aging of the population, the elderly's understanding and response to the new crown pneumonia epidemic is related to the quality of China's future epidemic prevention and control work. Based on this, this paper takes the elderly over 60 years old who attend outpatient clinics in a hospital in Jilin City as a survey sample, analyzes the elderly people's understanding of the new crown pneumonia epidemic and response plans through questionnaire survey, and proposes effective measures to improve the public's awareness level and response level, in order to help strengthen the new crown epidemic prevention and control response ability of the elderly. In the context of the global epidemic of new crown pneumonia worldwide, China has achieved very ideal results in epidemic prevention and control, effectively controlled the outbreak of the epidemic, and protected the life safety of the people, which is closely related to the continuous improvement of national epidemic awareness and prevention and control response capabilities. With the serious aging of the population, the elderly's understanding and response to the new crown pneumonia epidemic is related to the quality of China's future epidemic prevention and control work. Based on this, this paper takes the elderly over 60 years old who attend outpatient clinics in a hospital in Jilin City as a survey sample, analyzes the elderly people's understanding of the new crown pneumonia epidemic and response plans through questionnaire survey, and proposes effective measures to improve the public's awareness level and response level, in order to help strengthen the new crown epidemic prevention and control response ability of the elderly.

## Keywords

Seniors, the coronavirus pandemic, cognitive level, respond to the situation

## 1. Introduction

Since the outbreak of the new crown pneumonia epidemic, all regions of China have actively carried out educational activities related to the fight against the epidemic, so as to improve the public's awareness of epidemic prevention and strengthen the intensity of epidemic prevention. In the face of sudden diseases, our country has a large population base and a large elderly population, and the data of the sixth national census show that the proportion of

≥60-year-old elderly population in China is 13.26%. Because the elderly are a relatively special group, weak auto-immunity, belonging to the vulnerable group, coupled with the slow acceptance of information, the channel to obtain epidemic knowledge is relatively single, therefore, we must pay attention to the epidemic prevention publicity of the elderly, so that the elderly have a more comprehensive understanding of the new crown pneumonia epidemic, guide them to pay attention to the epidemic, strengthen prevention and control, and improve the overall epidemic prevention level in China [1].

## 2. Methods

### 2.1 Research objects

In this survey, the elderly who attended outpatient clinics in a hospital in Jilin City from January 2022 to December 2023 were randomly selected as the research subjects, and the age was required to be at least 60 years old. All subjects understand the purpose, method and expected results of this study, independently participate in this research activity, and have signed an ethical informed consent form, and this study has also been reviewed by the ethics committee of our hospital [2].

### 2.2 Method

This study collected basic information of outpatient patients who met the study conditions, including gender, age, ethnicity, and education level. At the same time, a self-made questionnaire was distributed to all selected subjects, focusing on the design of questions from three aspects: basic knowledge of the new crown pneumonia epidemic, risk factors and prevention plans, and statistics on the subjects' knowledge of relevant issues to judge the current elderly awareness and response to the new crown pneumonia epidemic [3].

## 3. Results

The results of this study showed that a total of 500 questionnaires were distributed and 479 questionnaires were recovered, with a recovery rate of 95% and an effective rate of 95.8%. Among the subjects, 206 were male, accounting for 43.01%, and 273 were female, accounting for 56.99%. What older people know about the pandemic is as follows:

**Table 1. The elderly know about the new crown infection**

Topic	n	number (%)
The novel coronavirus was named“COVID-19”	41	8.55
Transmission routes include direct transmission, aerosol transmission, and contact transmission	135	28.1
latent period	164	34.2
Incubation contagious (may be contagious)	215	44.8
Population susceptibility (general susceptibility to infection)	229	47.8
Symptoms of infection: dry cough, fever, etc	214	44.6

**Table 2. Older people know about the factors of infection in the new crown epidemic**

Topic	n	number (%)
Irregular work and rest can easily lead to illness	64	13.3
Older people with serious illnesses of their own are susceptible to illness	178	37.1
Visitors to crowded places are prone to illness	250	52.1
Going out without wearing a mask is prone to illness	347	72.4

**Table 3. Preventive measures for the elderly against the coronavirus pandemic**

Topic	n	number (%)
Master the seven-step handwashing method	32	6.68
Wear a mask	400	83.5
Vaccinations	313	65.4
Ventilation	410	85.5
Exercise	190	39.6

In terms of influencing factors, taking "The novel coronavirus is named as "COVID-19. For example, the individual influencing factors are shown in Table 3. The main influencing factors include the subject's payment category, income, and pre-retirement occupation, as shown in Table 4

**Table 4. Basic information**

	topic	number	X <sup>2</sup>	P
gender	man	206	0.203	0.653
	women	273		
age	60-70 years old	291	3.413	0.034
	70-80 years old	154		
	80 years old	34		
ethnic group	Han Chinese	437	0.840	0.360
	Other nationalities	42		
Education	Primary school and below	106	20.722	0.001
	junior high school	214		
	Secondary / High School	105		
	College/above	54		
Paid categories	Medical insurance for urban workers	225	3.013	0.019
	Medical insurance for urban residents	49		
	New Agricultural Cooperation	66		
	own expense	139		
revenue	Below 3000 yuan	260	27.748	0.001
	3000 to 4000 yuan	118		
	More than 4000 yuan	101		
Residency	Living alone	62	3.517	0.015
	Husband and wife live together	334		
	Living with children	71		
Pre-retirement occupation	rest home	12	16.877	0.001
	worker	230		
	farmer	91		
	Unemployed	33		
	Civil servant	112		
Marital status	individual	13	3.075	0.027
	unmarried	1		
	married	398		
	Divorce/separation	23		
	widowed	57		

**Table 5. Analysis of influencing factors**

influencing factors	$\beta$	SE	WaldX <sup>2</sup>	P	OR	Exp (B) 95%	
						lower limit	upper limit
age	-0.645	0.642	1.009	0.315		0.525 0.149	1.848
Education	-2.2504	1.234	4.120	0.42		0.082 0.007	0.918
Paid categories	1.057	0.491	4.624	0.032	2.877	1.098	7.540
revenue	-1.338	0.655	4.180	0.041	0.262	0.073	0.946
Residency	-0.865	2114.471	0.000	1	0.421	0	0
Pre-retirement occupation	-2.590	1.060	5.964	0.015	0.075	0.009	0.6
Marital status	-1.516	0	0	0.989	0.220	0.220	0.220

## 4. Discussion

### 4.1 Current status of the perception of the new crown pneumonia epidemic in the elderly

Since mid-December 2019, Wuhan City, Hubei Province has produced many cases of pneumonia of unknown cause with fever, cough, respiratory disorders, etc. as the main clinical symptoms in a short period of time, and the epidemic has begun to spread continuously. Studies have found that the cause of the disease is a new coronavirus, and the pneumonia caused by the pathogenic infection is called new coronavirus pneumonia [4]. After the outbreak of the epidemic, the Party Central Committee and the State Council attached great importance to it, and the Central Committee immediately set up a leading group for the response to the epidemic. General Secretary Xi made important support, demanding that the safety of people's lives and health be put first, and the epidemic prevention and control work should be strengthened. In this context, the rapid spread of knowledge about the coronavirus pandemic and the protective measures has increased the level of awareness of the new coronavirus symptoms. However, the elderly have relatively few channels to obtain information, and the acceptance speed is slow, and the cognitive level of the disease is low, which is one of the main factors affecting the prevention and control of the new crown pneumonia epidemic in China [5]. Moreover, it can be seen in the real-time epidemic data that the elderly have the characteristics of high incidence, general easy infection, rapid deterioration of the condition after infection and high mortality, and belong to the main group of new crown pneumonia epidemic prevention and control. Therefore, the Party and the government have emphasized several times that they attach importance to the epidemic prevention work for the elderly, and require the pooling of the strength of relevant subjects to use more effective programs to reduce the probability of infection among the elderly. In the group epidemic prevention work, the most critical measure is to improve the awareness level of the elderly about the epidemic, help the elderly understand the relevant knowledge of the new crown pneumonia more comprehensively, and then promote the development of relevant epidemic prevention work.

According to the results of this survey, the elderly have relatively little understanding of the knowledge about the new coronavirus, and only 8.55% of the elderly know the name of the new coronavirus; The understanding of the transmission route of the disease is insufficient, and the proportion of elderly people who understand is only 28.1%, which shows that the elderly lack the correct understanding of the correct transmission route of the virus; The incubation period of the disease was not well understood, including the time of the incubation period and the infectivity during the period, accounting for 34.2% and 44.8% respectively [6]. Some elderly people believe that the contagiousness of the disease is low, and 47.8% of the elderly believe that they are generally susceptible to infection; The proportion of elderly people who did not know enough about the symptoms of infection and did not know the main symptoms after infection, including dry cough and fever, was only 44.6%. It can be seen that the current status of the elderly cognition of the new crown pneumonia epidemic is not optimistic, and most of the elderly still fail to attract attention, which increases the probability of infection with new crown pneumonia in this part of the elderly.

### 4.2 Awareness of the risk factors of the new coronavirus epidemic in the elderly

The elderly do not have a comprehensive understanding of the risk factors of the new crown pneumonia epidem-

ic, so they cannot achieve targeted protection in daily life. Therefore, in the process of protection, the elderly are prone to over- or under-estimating the degree of risk, such as some elderly people think that their risk is high, and there are phenomena of excessive protection, including excessive hoarding of drugs and wearing multi-layer masks; Some elderly people think that their risk is low, just a common cold, and there are fewer protective measures, such as wearing masks incorrectly, or still going to some crowded places.

The results of this study show that most of the elderly have a certain understanding of the possibility of wearing masks to reduce the probability of disease, accounting for 72.4%, and relatively little understanding of other factors: understanding that irregular work and rest may cause diseases accounted for only 13.3%, in actual life, some elderly people have irregular life and rest, which is one of the main reasons for their infectious diseases; It is understood that the number of people with serious diseases is 37.1%, and some elderly people suffer from serious diseases, and their physical resistance is weakened, and the probability of disease is correspondingly increased, especially the prevention and control of new crown pneumonia needs to be paid attention to; Compared with students and practitioners, the elderly have relatively plenty of personal time, so there are more group activities, and since the outbreak of the new crown epidemic, there are still many elderly people participating in group activities or entering and exiting crowded places such as supermarkets and squares, which further increases their risk of contracting the new crown epidemic.

### 4.3 Prevention of the elderly condition

The results of this study show that the elderly do not have a comprehensive understanding of epidemic prevention and control measures, among which "holding indoor ventilation" and "being able to wear masks in public all the time" have the highest scores, 85.5% and 83.5% respectively, but these two methods belong to basic prevention and control measures, the former is a common way to prevent and control diseases, and the latter is a unified national requirement, so the popularity is relatively high. As for other protective measures, the awareness of the elderly is not ideal, and the proportion of elderly people who think that they can do physical exercise to prevent the new crown epidemic is 39.6%, proving that some elderly people do not realize that they can resist the spread of the new crown epidemic by improving their personal immunity; The proportion of active injection of domestic vaccines was 65.4%, indicating that the current vaccine popularity in China is not high, and the enthusiasm of the elderly to actively vaccinate is insufficient; Only 6.68% of the elderly can master the seven-step handwashing method, which is the main way to effectively avoid the spread of the epidemic, and the seven-step handwashing method can effectively eliminate the virus carried outside. It can be seen that the elderly group has basic epidemic prevention and control methods, but the pertinence is insufficient, in fact, it cannot effectively control the spread of the epidemic, and it needs to attract the attention of epidemic prevention and control personnel everywhere.

### 4.4 Improve access to disease prevention measures for older people

#### 4.4.1 Improve awareness

The channels for the elderly to obtain information are relatively single, so their understanding of the knowledge of the new crown epidemic is relatively one-sided. In response to this problem, diversified and targeted epidemic prevention and control knowledge education should be carried out for the elderly. The main channels for the elderly to obtain information related to epidemic prevention and control are cable TV and radio, and some elderly people can only understand the knowledge of the epidemic through other people. For example, although with the continuous spread of the epidemic, the elderly have a clearer understanding of the contagiousness and harm of the new crown virus, but the specific transmission channels and incubation period related knowledge, the understanding is not comprehensive, and even some elderly people explain the outbreak of the epidemic through fatalism. The fundamental reason is that the elderly, especially in some rural areas, have not yet owned or cannot fully use electronic communication equipment, resulting in obvious deficiencies in the depth, breadth and transmission speed of information related to epidemic prevention. In addition, due to the increase in age, the elderly have a narrow knowledge and weakened ability to discriminate, and there is a problem of listening to rumors, and they cannot correctly understand epidemic prevention knowledge. Therefore, staff such as community neighborhood committees, rural village committees and relevant institutions should carry out targeted publicity and education on epidemic prevention knowledge through diversified forms. For example, personnel can be organized to go to the door for publicity, or through telephone, SMS, WeChat and other means, to push knowledge related to epidemic prevention and control to them, for the elderly with a lower level of education, in addition to publicity and education by telephone, it is also necessary to print simple and easy-to-understand brochures, make audio and other ways for publicity. In areas with conditions, LED warning signs can be placed in population gathering areas such as shopping malls and

squares to warn the elderly to pay attention to personal safety during the epidemic, not to go to densely populated areas unless necessary, and to wear masks throughout the process. It is also necessary to actively coordinate with the mass media, requiring them to pay attention to the guidance of public opinion during the epidemic, and while delivering real information content to the elderly at the first time, it is also strictly forbidden to hype up certain inappropriate remarks to avoid negative impact on epidemic prevention and control work. Government departments should pay close attention to the public opinion situation, and if false remarks or content are found on the Internet, they must promptly refute the rumors, so as to avoid the personal economic interests or physical health of the elderly from being negatively affected [7].

#### 4.4.2 Improve the capacity of epidemic methods in the elderly

First, the staff of community neighborhood committees and rural village committees can regularly distribute epidemic prevention and control brochures to the elderly in the community or village, and specify specific and effective protection measures in the brochures, including forming healthy work and rest rules, regular ventilation, and introducing the seven-step handwashing method, so as to improve the epidemic prevention ability of the elderly [1].

Second, establish a WeChat group to regularly remind the elderly of relevant precautions in the group, such as ventilation time, medication time, work and rest time, etc., so as to urge the elderly to continuously improve the level of prevention. At the same time, the government should actively coordinate the production, storage and supply of epidemic-related materials, promote relevant enterprises to increase production capacity, and provide sufficient material protection for the elderly. In addition, actively coordinate social organizations, volunteers and social workers to help the elderly solve difficulties such as daily life care, medical treatment, etc., and ensure the meal needs of some lonely, widows, lonely and empty nest and other particularly difficult elderly people, through the above methods, on the one hand, it can help the elderly improve the level of epidemic prevention and reduce the probability of the elderly being infected with the new crown epidemic; On the other hand, it can also solve the needs of the elderly to go out to the greatest extent and avoid the spread of the epidemic [8].

Third, local governments should set up a special vaccination class, focus on the elderly over 60 years old, introduce the advantages of vaccination to them in detail, and complete the full vaccination and booster immunization of the elderly as soon as possible, effectively improve the physical fitness of the elderly, and then improve the overall level of epidemic prevention and control in China.

## 5. Conclusion

The new crown pneumonia epidemic is still spreading, and prevention and control has become normal, which requires not only the active ability of medical related departments, but also the active participation and cooperation of all sectors of society. The elderly are the focus of pneumonia epidemic prevention and control work, and it is necessary to continuously improve their awareness of the epidemic and the level of prevention and control through effective channels, so as to ensure the efficient development of epidemic prevention and control work, and at the same time promote the overall level of China's new crown pneumonia prevention and control work.

## References

- [1] Deng Lifang, Jiang Chirui, Wang Naibo, Wan Dezhi, Xu Lewei, Wu Lei. Current status and influencing factors of new coronary pneumonia awareness level and protective behavior of residents in Jiangxi Province in 2021 [J]. *Journal of Preventive Medicine Information*, 2022, 38(11):1446-1453.
- [2] Wang Junxiu, Zhang Yan. Risk cognition, social sentiment and future expectations: Changes in social mentality at different stages of the epidemic [J]. *Social Science Front*, 2022(10):220-237.
- [3] Zeng Xiaojin, Yang Yuanbin, Chen Weichao. Public media information exposure and risk cognition under epidemic situation: Based on the perspective of spatial difference [J]. *Jinmedia*, 2022, 30(06):127-130.
- [4] Shen Guanchen, Wang Yan. Research on psychological support for elderly people living alone after the epidemic: Based on the perspective of social support theory [J]. *Journal of Changchun University of Science and Technology (Social Science Edition)*, 2022, 35(03):78-83.
- [5] Sun Qihu, Guan Yutong. Research on the digital divide phenomenon of the elderly group under the new crown pneumonia epidemic: A case study of the dilemma of using "health code" in the elderly group [J]. *Journal of Anhui University of Science and Technology (Social Science Edition)*, 2022, 24(02):81-86.
- [6] Mou Di, Su Xiaoge, Li Peilong, Zhao Hongting, Li Zhili, Zhang Muli, Zheng Jiandong, Cheng Ying, Cui Ying, Sun Chengxi, Li Zhongjie. Investigation and analysis of public awareness of the prevention and control of novel coronavirus pneumonia [J]. *Practical Preventive Medicine*, 2021, 28(09):1030-1034.

- [7] Mou Yi, Na Qian. An empirical study on the protective behavior of the elderly in rural areas in China from the perspective of communication [J]. *Modern Communication (Journal of Communication University of China)*, 2021, 43(07):70-75.
- [8] Xu Yanhua, Cao Songmei, Jia Yingying, Wang Shuhua, Wang Wei. A mixed study on the cognition and psychological state of epidemic prevention knowledge of the elderly at home under the new coronavirus pneumonia epidemic [J]. *Journal of Taizhou Vocational and Technical College*, 2021, 21(01):78-82.