

Acute Psychological Responses in the First Days of the COVID-19 Lock-Down Order in China; A Population-Based Survey

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Report

Abstract

Background: The corona crisis is an unprecedented health emergency, with serious risks for physical and mental health. After the outbreak of the Covid-19 pandemic in Wuhan, China, the Chinese government was the first to implement a general lock-down in the Hubei Province on January 23rd 2020, which affected more than 50 million people.

Methods: From 27th January to 2nd February 2020, 3934 inhabitants of China and 3826 inhabitants of Hubei Province were interviewed through an online survey about their physical and mental health problems following the general lock-down in the Hubei Province on January 23rd 2020.

Results: In the early stage, people under lock-down mostly suffered from health-related anxieties, sleeping problems, physical complaints, and symptoms of anxiety and depressive disorders.

Conclusion: Our data indicate that social isolation is an unpleasant experience that has immediate psychological consequences for the individual. Follow-up studies to investigate the long-term psychological and psychosomatic problems resulting from the COVID-19 crisis are necessary.

Keywords: COVID-19 pandemic; Lock-down; Mental health; Sleeping disorders; Anxiety

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Introduction

The corona crisis is an unprecedented health emergency, with serious risks for physical and mental health. After the outbreak of the Covid-19 pandemic in Wuhan, China, the Chinese government was the first to implement a general lock-down in the Hubei Province on January 23rd 2020, which affected more than 50 million people.

After the initial focus on securing basic medical care, expanding intensive care ventilation capacities, and preventing further chains of infection, the psychological consequences of the pandemic are now becoming increasingly visible. Due to the rapid and dramatic spread of the virus, especially at the beginning of the pandemic, structured reports and studies on the development of mental health in the context of the corona crisis are necessary. Here we would like to present the results of a large-scale online survey conducted in the initial phase of the pandemic to assess the need for psychological care.

Methods

From 27th January to 2nd February 2020, 3826 inhabitants of Hubei Province and 3934 inhabitants of other parts of China were interviewed through an online survey about their health-related anxiety, sleeping problems, physical symptoms, and emotional reactions. The study was conducted as part of an online survey on knowledge of, attitudes towards, and practice regarding COVID-19 (Zhong et al., 2020).

Results

The results showed that 31% of the respondents were men and 69% were women, with a mean age of 33.1 (10.5) years. More than 50% of respondents had a university degree. All participants provided an online consent. No significant differences were found between the province of Hubei and other parts of China in any of the items. Therefore, we report the results for the whole sample here.

Knowledge about coronavirus

96.4% of the respondents were aware of the clinical manifestations of the new coronavirus pneumonia infection and 98.3% of the respondents knew that isolation and treatment of infected persons is an important measure in the reduction of the spread of the virus.

Health-related anxiety

- 77.6% were concerned about getting infected with COVID-19 and 28.7% thought that they had probably already been infected with the virus.
- 89.0% were concerned about their family members already having caught COVID-19.
- 47.9% believed the probability of dying from the virus to be high to very high.
- 45.7% believed the probability of overcoming an infection with the virus to be low to very low.

Sleeping problems

Within the last month

- 30.2% had difficulties falling asleep,
- 27.1% had difficulties sleeping through the night,
- 17.5% woke up early, and
- 11.7% reported having nightmares (The content of the dreams was mainly related to COVID-19, infected family members, lack of medical care, death, and the end of the world.).

Physical complaints

Within the past 2 weeks, 30.8% reported physical complaints,

- 30,2% coughing,
- 20.8% headache,
- 18.0% heart palpitations and
- 14.2% nausea or upset stomach.

Emotional reactions

Within the past 2 weeks

- 17,4% were often worried,
- 10.4% reported panic attacks,
- 7.3% reported feelings of helplessness,
- 6.4% reported feeling pessimistic most of the time,
- 5.9% reported feelings of anger, and
- 3.3% reported feelings of desperation

Outlook

94.3% of the inhabitants were confident that the epidemic can be successfully controlled within 6 months.

Discussion

The data suggests that in the early stage of the pandemic people under lock-down mostly suffered from health-related anxieties, sleeping problems, and symptoms of anxiety and depressive disorders. The respondents took the threat of the virus seriously, were very concerned about themselves or their family members getting infected, and were scared of not overcoming the virus infection. However, at the same time, they were confident that the epidemic could be controlled (Zhong et al., 2020). This is in line with previous studies (Brooks et al., 2020).

To the best of our knowledge, this report contains the only data on psychological stress among the population of Hubei, China, in the first 10 days after the COVID-19 lock-down order on January 23, 2020. Wang et al. (2020), in a comparative study, examined the psychological responses of the general population of 194 cities in China in the initial stage, but not specifically in Hubei. An interesting phenomenon is the apparent contradiction in terms of belief in high mortality and low treatment options, and the belief that the epidemic can be successfully controlled. In the Chinese culture, viruses can be compared to tigers; although people realize that tigers can eat humans, they also believe that hunters can grab the tiger and keep it in a cage. Unfortunately, due to the limited space, these aspects cannot be discussed here.

The data are not representative in terms of gender, age, and level of education. The same limitation was present in the study by Wang et al. (2020) in which students were interviewed online using snowball sampling techniques. Another weakness was the lack of standardized questionnaires on mental disorders. Nevertheless, the data show that the population was significantly burdened by fears and physical complaints in the first few days.

Conclusion

Our data indicate that social isolation is an unpleasant experience that has immediate psychological consequences for the individual. If only a small percentage of these The treatment of these long-term psychological and psychosomatic problems resulting from the COVID-19 crisis will be of great concern for mental health specialist in

China and the world for months to come. The task for the future is to find a balance between the necessity of mandatory mass lock-down and the long-term psychosocial consequences (Rubin & Wessely, 2020).

Conflict of Interests

Authors have no conflict of interests.

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