

# Research Snapshot

## Factors impacting mental health in China during the initial stage of the COVID-19 outbreak

### What is this research about?

There's no known research about the mental health of the Canadian population during the COVID-19 pandemic and limited research from China's experience. This research was one of the first studies to focus on the mental well-being of the general population in China immediately after the World Health Organization (WHO) declared COVID-19 as a public health emergency of international concern.

### What did the researchers do?

The researchers provided an online survey for the general public in China. The survey asked about a number of factors to see their association with mental health status and the psychological impact of COVID-19 (together these will be referred to as "mental well-being").

These include:

- demographics
- physical health in the last two weeks
- concerns and knowledge about COVID-19
- precautionary measures taken to protect against COVID-19.

Psychological impact was measured using the Impact of Event Scale-Revised (IES-R) and mental health status was measured using the Depression, Anxiety and Stress Scale (DASS-21).

### What you need to know

Researchers looked at the immediate impact of the COVID-19 outbreak on mental health in China. Being female, being a student or having physical symptoms was associated with poorer mental well-being, while satisfaction with health information and taking precautionary measures was associated with better mental well-being. Health authorities and professionals should take this into consideration when planning health communications and mental health interventions. COVID-19 information and mental health resources should also be made readily available.

### What did the researchers find?

The researchers collected responses from over 1200 people in almost 200 cities across China. During the initial phase of the COVID-19 outbreak in China, more than half of the respondents rated the psychological impact as moderate to severe, and about one-third reported moderate-to-severe anxiety.

- **Key demographics:** The outbreak was more likely to negatively impact women and students' mental well-being. Those with no formal education were more likely to have higher levels of depression.
- **Physical health:** People showing symptoms, such as chills or a cough, and those with a history of chronic illness were



more likely to report poorer mental well-being. Concern for family and children was associated with higher levels of stress and anxiety, respectively.

- **COVID-19 knowledge and precautionary measures:** Satisfaction with health information and taking measures to protect against COVID-19, such as washing hands and wearing masks, were associated with better mental well-being. Providing current and accurate information, including the number of recovered cases, was associated with lower stress levels. Having information available on treatment, how the virus spreads and location of cases (i.e., online tracking map) were associated with lower levels of anxiety.

### How can you use this research?

While this research was done in China, it provides general insights for system and program planners to develop mental health support strategies during COVID-19. Health authorities should consider providing early interventions for high-risk groups. Up-to-date and accurate health information, such as information on cases, treatment and transmission, should be readily available and presented in a variety of digestible formats. Underscoring the importance of precautionary measures, such as self-isolation and handwashing, may give a greater sense of control and support positive mental health.

Public health and health care professionals can provide mental health resources for patients who present with symptoms. Taking a family history and asking about concerns for family may help identify patients with poorer mental health.

### Limitations of the research

The survey was initially sent to university students in China, who were asked to distribute it widely. This means the study population is not representative of the general population in China nor is it representative of the mental health of Ontario's population. In addition, mental health status was self-reported and may not align with an assessment by professionals.

### About the researchers

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### Keywords

COVID-19, Coronavirus, Infection, Mental Health, Psychological Impact, Stress, Anxiety, Depression, Precautionary Measures, Health Promotion, Health Communication

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