

Psychological stress response and intervention status of College students under COVID-19

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Abstract: The outbreak of COVID-19 in 2019 has become a major public health event, characterized by rapid spread, wide spread, unclear epidemic trend and long incubation period. Under the influence of the epidemic, people have panic, fear, anxiety and other psychological stress crisis, college students are no exception, especially during the period of isolation at home and school closure after the resumption of school, highlighting some serious psychological stress reaction. This paper aims to analyze the psychological stress manifestation and intervention methods of college students under public health emergencies through literature review, and to explore the path of coping with adverse psychology of college students under COVID-19 prevention and control.

COVID-19 (Corona Virus Disease 2019) is a new infectious Disease originating in Hubei province in December 2019. Due to its strong infectivity, uncertainty of pathogen and challenging treatment, China classifies this Disease as a Class B infectious Disease and manages it as a Class A infectious Disease^[1]. After more than a year of transmission, COVID-19 has spread globally. At present, the epidemic situation in China is under control, accompanied by sporadic distribution in some provinces and cities. Universities are places to train national talents. Epidemic prevention and control should not be neglected, and the management of daily life of college students has been normalized. In the face of the sudden outbreak and the normal prevention and control of the epidemic, college students' psychological stress and intervention measures have become the focus of everyone's research.

1. COVID-19 is a public health emergency

The rapid development of COVID-19, the number of ways of infection, the high prevalence and the serious consequences. On January 24, 2020, Hubei launched a level I public health emergency response. Subsequently, 31 provinces initiated level I public health emergency response. On 31 January 2020, the Who declared the novel Coronavirus pneumonia outbreak a Public Health Emergency of International concern^[2].

A public health emergency refers to a sudden outbreak of a major infectious disease, a group disease of unknown cause, a major food and occupational poisoning and other events that seriously affect public health, which may cause or may cause serious damage to public health. According to its nature, degree of harm and scope of involvement, public health emergencies can be divided into four levels: particularly major (Level i), major (Level ii), major (level iii) and general (Level iv), and red, orange, yellow and blue are successively used for warning^[3]. COVID-19 is classified as a major public health emergency according to the classification standards. The lockdown, shutdown, school suspension and home quarantine measures taken to prevent and control the spread of the epidemic have disrupted the daily life of ordinary people, especially in the most severely affected areas.

2. COVID-19 can cause psychological stress and psychological crisis

COVID-19 can not only cause fever, cough, fatigue, appear serious respiratory distress syndrome, or respiratory function failure leads to death, also can cause large crowd psychological unbalance, developed acute psychological stress reaction, such as anxiety, fear, insomnia, anger, depression, helpless despair, severe cases can be characterized by psychological crisis^[4].

Psychological stress refers to the physiological, psychological and behavioral adaptive reaction

process in which individuals must adapt or respond to perceived (cognitive evaluation) threats or challenges posed by environmental stimuli^[5]. Psychological crisis refers to the serious psychological imbalance formed when an individual encounters some major events or problems^[6-7]. In particular, front-line medical staff and confirmed patients will have obvious acute psychological stress reaction, and even self-injury, other injury and suicide in severe cases. When symptoms obviously affect the disease treatment, it is necessary to treat acute stress disorder with drug assistance^[8]. In the face of the sudden epidemic, the general public will also have psychological stress and psychological reaction, such as too nervous, anxiety, depression, hypochondria, fear, insomnia, anger, easy to listen to rumors, panic buying events.

3. COVID-19 has complicated college students' psychology

College students are a special group, different from the general public. Less life experience, lack of life experience, low psychological endurance, poor stability, immature cognitive style and defense ability, often lack of coping ability in the face of emergencies, prone to anxiety, tension, fear, pessimism, irritability, depression and other abnormal emotions^[9-12]. At the same time, college students are under pressure from their studies. During the epidemic period, college students cannot start school normally, especially those senior students who are faced with graduation, job selection and further study will have a stronger psychological reaction^[13-14]. If these psychological stress can not be timely dredged, there may be psychological stress disorder, causing psychological diseases, resulting in secondary injuries to students, and affecting the stability and harmony of the university campus, campus public incidents may occur.

According to the characteristics of college students, it is very necessary to provide psychological intervention and help according to the differences in individual characteristics and psychological quality of college students, as well as their different abilities to accept and adapt to disasters^[15-16].

4. Research progress of psychological crisis intervention in public health emergencies

4.1 The emergence and development of psychological crisis intervention

Psychological crisis intervention of public emergencies appeared earlier in foreign countries. The landmark event is that after a big fire broke out in a club in Boston in 1942, Lindeman studied the grief reaction of 493 bereaved families and survivors and conducted psychological intervention for them, which was the first formal psychological crisis intervention in the world and also the first psychological crisis intervention for public health emergencies^[17]. Lindeman then collaborated with Caplan to develop the Wellesley Project, a psychological research project for bereaved people. In the United States by the 1960s, crisis intervention expanded to suicide prevention. The crisis management theory of public emergencies has gradually become an independent discipline to be studied and practiced, and the public service work for personal psychological damage has been carried out. After the development of the 1970s, crisis intervention received more attention^[18]. For example, the United States has built a relatively complete psychological crisis intervention system, which played a significant role in the 911 incident in the United States.

Psychological crisis intervention appeared late in China, and the prototype appeared three months after the lancang earthquake in Yunnan province in 1988. The Institute of Mental Health of Peking University investigated the mental health status of earthquake victims. The formal psychological crisis intervention of public emergency started from the fire in Karamay city in December 1994. The Institute of Mental Health of Peking University conducted psychological intervention for the bereaved families and survivors for two months. In the following ten years, the development of psychological crisis intervention in China was slow, but psychological crisis intervention appeared in dalian air crash in 2002, SARS and Jiaojia-Jinan Railway accident in 2003^[19-21]. Since 2004, special psychological crisis intervention centers have been set up in Sichuan, Hangzhou, Shenzhen, Guangzhou, Chengdu and other provinces and cities to constantly improve psychological crisis intervention in public health emergencies. In the Wenchuan earthquake in May 2008, there were many

casualties in this public health emergency, and the Ministry of Health mobilized a large number of psychologists in the rescue team to carry out psychological crisis intervention^[22]. This public health emergency psychological crisis intervention can be said to be a turning point in China's psychological crisis intervention, the country began to pay attention to the psychological crisis intervention work, more researchers and funds into psychological intervention research. The scope of psychological crisis intervention is also expanding. From the beginning, only the victims and their families were concerned, but from the SARS crisis in 2003, medical staff also faced great psychological pressure and the public had serious panic^[23]. In the face of frequent public health events in 2008, the ministry of health issued the guiding principles for emergency psychological crisis intervention, the intervention of the target population is divided into four levels: the first level for the survivors of the disaster of the second population was a witness to the scene of the disaster (including rescuers), the third pole was a witness to survivors and relatives, etc., the fourth is behind the rescuers.

In our country, psychological crisis intervention is constantly improved in terms of institutional setting, personnel allocation and stress guiding principles.

4.2 Development of psychological crisis intervention techniques.

Psychological crisis intervention technology is relatively perfect in foreign countries and most of the intervention technology used in China is borrowed from foreign countries. The development has gone through several stages.

4.2.1 Psychodynamic therapy

This was one of the first techniques used in crisis intervention, and it was related to the freudian psychoanalysis that was prevalent at the time, which included long range psychotherapy in the form of recliner talk and short range dynamic psychotherapy that lasted less than six months. Up to now, psychodynamic psychotherapy is still used by many psychologists in crisis intervention.

4.2.2 Trauma-focused Cognitive Behavioral Therapy (TF-BCT)

This method began in the 1950s and 1960s, and is represented by Beck's cognitive therapy and Ellis's rational emotion therapy. Developed to the late 1980s, this method is often used in child trauma treatment, has been widely used to treat acute psychological stress disorder, depression, anxiety and so on.

4.2.3 Interview with Critical Incident Stress Debriefing (CISD)

The therapy emerged in the late 1970s as an intervention for a small group of people. The original purpose of the law was to provide support and help to workers in crisis stress, such as police officers and firefighters. Mitchell perfected this method into a very structured group intervention technique in 1983. Group intervention is divided into 7 steps. The 7 stages usually take 2-3 hours to intervene within 24-72 hours of the crisis, and only focus on the on-site stress situation. A lot of relevant evidence proves that the intervention effect of interview in crisis event stress groups is good^[24].

4.2.4 Eye Movement Desensitization and Reprocessing (EMDR)

Eye movement desensitization was created by American psychologist Francine Shapiro in 1987^[25], and later perfected into eye movement desensitization and information reprocessing technology. The technique allows memories solidified in the hippocampus to be recalled through rapid eye movement, but without experiencing the trauma of the memory itself. This technology has eight steps, is highly operable, can be completed within A few days, and the course of treatment is short. A large number of relevant studies have proved that EMDR has obvious efficacy in acute stress disorder. In 2000, the International Traumatic Stress Association listed EMDR as A "A" method for the treatment of PTSD^[26]. As a result, the technology is increasingly being used in crisis interventions, particularly in dealing with post-traumatic stress disorder and depression.

5. Status of psychological crisis intervention in the context of COVID-19

COVID-19, which struck humans in December 2019, arrived with such ferocity, scale and severity that it has now become an infectious disease threatening the world. After the outbreak of the epidemic, China launched a level I response to a major public health event, and began psychological crisis intervention in a timely manner. For specific measures, the National Health Commission issued COVID-19 Emergency Psychological Crisis Intervention Guidelines on January 26, 2020^[27], which proposed intervention guidelines for possible psychological problems of different groups and key points of psychological crisis intervention during epidemic prevention. The aim is to guide the scientific and standardized psychological crisis intervention work of novel coronavirus infection pneumonia epidemic in different regions. On January 28, the Ministry of Education issued a notice calling for further use of the education system's disciplinary and talent advantages to carry out psychological crisis intervention for teachers, students and the general public. On 2 February, under the Joint prevention and control mechanism of The State Council for the novel Coronavirus pneumonia outbreak, the Circular on the Establishment of psychological Assistance Hotlines for Epidemic Response was issued, requiring all localities to set up psychological assistance hotlines for epidemic response on the basis of the existing ones. The coronavirus outbreak is not only a major public health event, but also a major psychological crisis. In early February, the NHC organized the timely publication of "50 Questions on Psychological Support Skills of Community Services in Response to COVID-19" edited by Ma Hong^[28], and opened a psychological assistance hotline, dispatching psychologists and psychiatrists to frontline diagnosis and treatment teams to provide psychological intervention for patients and medical staff. Psychological crisis intervention has become an integral part of the clinical management of COVID-19.

In view of the importance of epidemic control in colleges and universities, China published COVID-19 Prevention and Control Guidelines for Colleges and Universities in March 2020^[29] to provide guidance for the normal resumption of classes in colleges and universities, in which pages 79 to 88 detail the guidelines for mental health in colleges and universities under the epidemic situation, laying down guidelines and pointing out the direction of psychological intervention for college students. According to the situation of the university, students' major, sources of students and the investigation of mental health problems, colleges and universities conducted research on corresponding intervention policies^[30-31], to explore the psychological intervention path of college students in various aspects under the epidemic situation.

6. Conclusion

All in all, the psychological stress and crisis caused by COVID-19, whether it is prevention before the epidemic, early warning during the epidemic, or recovery after the epidemic, urgently need to develop a set of effective programs. Especially for the psychological reaction of college students, intervention strategies should be formulated according to the situation of psychological reaction of college students on the basis of preliminary investigation, so as to ensure the harmonious and stable college environment and orderly and healthy college life.

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