

A Review of the Progress of Research on the Psychological Impact of Public Health Emergencies on Students in Higher Education

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Abstract

An international public health emergency (PHEIC) is "an unusual event that poses a public health risk to other countries through the international spread of a disease and that is likely to require a coordinated international response." With the rapid global spread of COVID-19, the World Health Organization declared this novel coronavirus outbreak to be an international public health emergency. Unlike other situations, the psychological stress caused by this event is not unilateral in its origin. The increased pressure of school work and the accumulation of family conflicts caused by the epidemic will have a certain degree of psychological impact on university students. It is important to understand the psychological well-being of university students in the midst of the epidemic, so that we can propose appropriate measures to deal with it.

Keywords

Public Health Emergencies; COVID-19; Psychological Well-being of University Students.

1. Background of the Study

In the current situation where the start of school is delayed due to the epidemic, the concerns of our university students are mainly manifested in the fear of the epidemic situation, checking every day for new cases and thus feeling panicked, scared and even worried for the people in the epidemic areas; also in the fear that the epidemic will continue to develop and cause more harm and affect their future progress in school; and in the fear that they will be accidentally infected and become carriers of the virus. In particular, students who are about to enter professional practice and those with fever and cold symptoms are closed at home and worried about the lack of face-to-face communication with people. A small number of students are close to depression because they are unable to go outside and breathe the outdoor air for long periods of time. The internal anxiety caused by physical and psychological discomfort, loss of emotional control, daily sleeplessness, reduced cognitive ability and unclear self-concept worsen the situation and create a vicious circle.

2. Research Methodology

The keywords "psychology of university students during the New Coronavirus pneumonia epidemic", "psychological regulation of epidemic prevention and control" and "psychological state of the sudden epidemic" were used in PubMed, CNKI, CQVIP and Wanfang databases. The literature related to the psychology of college students during the new epidemic was searched in PubMed, Zhiyuan, Vipshop and Wanfang databases, and cluster analysis was conducted. A total of 79 articles were included in Wanfang, 2 articles in Vipshop and 17 articles in Zhiyuan, and 5 articles were finally used as the literature for this review.

3. Research Content

The number of participants in the study on the psychological situation of university students during the "Newcastle Pneumonia" epidemic and educational countermeasures was 376. Of these, 73 (19.41%) were male students and 303 (80.59%) were female students; 222 (59.04%) were freshmen, 63 (16.76%) were sophomores, 39 (10.37%) were juniors, and 52 (13.83%) were seniors. In addition, the survey also interviewed certain students by telephone. The sampling revealed that university students during the home response to the epidemic showed varying degrees of emotional problems, such as panic and fear, anxiety and worry, depression and agitation, and depression and loss. Of these, the largest number of students reported being bored and depressed. In addition, 14.1% of students reported adverse behavioural reactions such as insomnia, fidgeting, depressed yelling and irrational behaviour. Another 45.48% of the students' family members experienced these emotional states, 13.83% of the students' family members experienced these behavioural reactions, and 4.52% of the students reported being easily influenced by their family members [1]. In a survey on the psychological status of students in three universities in Beijing during SARS, a total of 6280 valid questionnaires were collected, with a return rate of 92.4%. The average age of the respondents was (20.3-2.0) years old, with 3735 male students (59.5%), 2433 female students (38.7%), and 112 students of unknown gender (1.8%); the composition of majors was 4168 (6.4%) in science and technology, 1,159 (18.5%) in medicine, 944 (15.0%) in arts, and 9 (0.1%) of unknown gender; The academic composition was 5,833 (92.9%) undergraduates, 287 (4.6%) postgraduates and 160 (2.5%) unspecified. The results showed that the detection rate of male students was higher than that of female students (8.1% and 5.9%, respectively, $x=10.73$, $P=0.001$); the detection rate of undergraduate students was higher than that of postgraduate students (7.3% and 3.5%, respectively, $x=5.95$, $P=0.015$); the difference in detection rate among different majors was statistically significant (5.5% in medicine, 7.2% in science and technology, 9.9% in arts. $x=14.48$, $P=0.001$); the detection rate was related to the level of knowledge of SARS (7.4% for those who knew a lot about SARS, 6.8% for those who knew in general. $P=0.000$); the detection rate was related to the level of knowledge of SARS prevention and control measures (6.5% for those who knew a lot about SARS prevention and control measures, 7.0% for those who knew a lot, 27.8% for those who did not. $x=95.52$, $P=0.000$); the detection rate was related to the level of concern about the epidemic (7.4% for those who were very concerned about the epidemic. 7.4%. Those who were generally concerned were 6.2%. $P=0.000$); the detection rate was related to the degree of impact of closed management on study and personal life (12.5% for those who thought it had a great impact, 5.2% for those who had an average impact and 7.2% for those who had no impact, $x=85.43$, $P=0.000$); the detection rate was also related to the effectiveness of control measures (56% for those who thought they had a The detection rate was also related to the effectiveness of the control measures (56% of the students considered the control measures to be significantly effective, 7.8% moderately effective. In addition, the detection rate was lower among those who were confident that they could overcome SARS than those who were not (6.3% and 28.7% respectively, $x=194.89$, $p=0.000$). It is easy to see that the presence of psychological problems is closely related to behavioural intentions to fight SARS, with a higher proportion of students without psychological problems having correct behavioural intentions than those with psychological problems. This shows that knowledge and attitudes can influence psychological status, and psychological status can influence behaviour [2]. In the study on the impact of the new coronary pneumonia epidemic on the psychological health of university students and countermeasures for adjustment, a total of 1315 university students were selected, including 233 male students (17.72%) and 1082 female students (82.28%); the average age was (19.86±1.84) years; 1100 medical students (83.65%) and 215 non-medical students (16.35%); freshman students 561 (42.66%), sophomores 467 (35.51%), juniors 253 (19.24%), seniors 28 (2.13%), others 6 (0.46%); 441 (33.54%) university students living in urban areas, 232 (17.64%) in rural areas and 642 (48.82%) in rural areas; within the last month, 4 (4) students entering and leaving or Wuhan by way of Wuhan 4 students (0.3%) and 9 students (0.68%) who came into contact with people returning from the infected area; 67 (5.10%) university students were under medical isolation (excluding home isolation for the general

population), 11 (0.84%) had been under medical isolation and 1237 (94.07%) had never been under medical isolation; 8 (0.61%) university students 816 (62.05%) students spent less than one hour a day browsing news related to the outbreak, 358 (27.22%) students spent one to two hours, 82 (6.24%) students spent about two to three hours, 59 (4.49%) students spent more than three hours; 877 (66.69%) university students needed study materials and protective materials from their schools; 633 (48.14%) university students needed psychological support from their schools; 923 (70.19%) university students needed information on follow-up academic arrangements from their schools; and 861 (65.48%) students needed to know the real situation of prevention and control at their schools. Therefore, during the outbreak, schools should take the lead and play the role of a backbone to bring students' hearts and minds together, conducting online meetings and thematic group days, etc. Students have "returned to school" and "returned to the team", so that their emotions gradually stabilised[3]. Finally, according to a survey on the psychological state of the general public, 60.7% and 41.2% of people felt nervous and fearful respectively when infectious diseases were around, while only 27.1% remained calm, indicating that the majority of people in the infected areas experienced negative emotions of fear, pessimism and helplessness, which in turn caused headaches, nausea and insomnia[4]. This is also the case for the general public, not to mention students who are not yet mature and have not experienced any major storms. In an online survey of 3,881 university students in Guangdong, an unordered multicategorical logistic regression model was used for statistical analysis. Results 69.47% of university students had a high level of awareness of COVID-19; the incidence of anxiety was 26.60%, of which 23.19%, 2.71% and 0.70% were mild, moderate and severe anxiety respectively; the incidence of depression was 21.16%, of which 16.98%, 3.17% and 1.01% were mild, moderate, moderate and severe. The results of the multifactorial analysis showed that older age, higher awareness of COVID-19, and more health behaviour change in the future were associated with less anxiety and depression among university students, and those in rural areas, non-medical professions, and receiving more than half of the negative information in the epidemic information were more likely to have anxiety, and those who were female, in the suburbs of their current location, had a history of alcohol consumption, and received more than half of the negative information in the epidemic information were more likely to have ($p < 0.05$). In view of such situations, relevant government departments and universities should strengthen detection and information management, take different health education measures in a timely manner according to college students' own characteristics, carry out extensive and in-depth health education and health promotion activities, guide college students to adopt positive and healthy behaviours, and prevent them from being negatively affected by the emergency through mutual help[5]. The western part of China is a multi-ethnic family, and this survey will help us to understand the impact of the epidemic on the psychology of different ethnic groups, different regions and different majors, and the different measures we have taken in response to the epidemic, which will help us to gain a deeper understanding of the differences between ethnic groups and the factors affecting them.

4. Summary

When faced with an epidemic of such a rare scale, some students are prone to panic and anxiety and even depression. On the one hand, this is due to their lack of knowledge about the new coronary pneumonia. On the other hand, the delayed start date of school puts students with little self-control on hold as they have nothing to do at home. This is most evident in university students and especially in graduates. The aim of this survey is to understand the psychological impact of the epidemic on university students in western universities through an online questionnaire, the psychological capacity of students in the face of emergency situations and their coping strategies, and to give feasible advice on the results. In the middle of the epidemic, the school should ensure that the study programme is carried out in an orderly manner online, while also holding daily class meetings to give university students a sense of belonging and participation, and to strengthen psychological counselling for students with suspected psychological problems. In the later stages of the epidemic, schools should

plan ahead for the start of the school year and coordinate with various departments so that students can return to school and resume their normal studies.

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