INPLASY PROTOCOL

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Prevalence of anxiety symptoms among Chinese university students amid the COVID-19 pandemic: a systematic review and meta-analysis

Wang, XH[1]; Liu, QZ[2].

Review question / Objective: The prevalence of anxiety disorders among Chinese college students during the COVID-19 epidemic.

Eligibility criteria: The inclusion criteria for eligible studies are: (a) The prevalence of anxiety symptoms is reported in the article (b) The subjects of the study are Chinese college students, including overseas Chinese students (c) Anxiety symptoms are measured with standardized measurement tools (d) All studies It was carried out during the COVID-19 epidemic. We excluded the participants from non-Chinese college students, a mixed study that did not separately report the results of a group of college students, and a study that did not use standardized test tools for anxiety.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 27 October 2021 and was last updated on 27 October 2021 (registration number INPLASY2021100104).

INTRODUCTION

Review question / Objective: The prevalence of anxiety disorders among Chinese college students during the COVID-19 epidemic.

Condition being studied: College life is a very important stage in a person's life. When a person enters a university from high school, he will face many changes. Interpersonal communication and even employment will bring mental health problems to college students. Among college students, mental health problems are very common. Studies have found that Chinese college students have moderate anxiety, and with social development, college students' anxiety has also increased. However, due to stigma,

shortage of human resources, and decentralized service delivery model, China's mental health utilization rate is low. In addition, college students are in their early adulthood, and are relatively independent psychologically, but they are not yet fully mature. During this period, parent-child conflicts frequently occurred, even in the late teenage years. Therefore, the mental health of Chinese college students deserves attention. In a survey of medical students, it was found that the average prevalence of anxiety disorders was as high as 27.22%. Since December 2019, there has been an outbreak of pneumonia caused by a new type of coronavirus. This is a public health incident that has attracted the attention of the international community. The rapid spread of the new coronavirus and the risk of death may increase the risk of mental health problems for the general public. Affected by the epidemic, the Ministry of Education of China requires the extension of the spring semester of the 2020 academic year. College students cannot return to school normally, cannot complete graduation tasks in isolation at home, postpone graduation dates, and increase the pressure on college students. After the SARS outbreak in my country in 2003, the public's psychological problems increased, so timely psychological intervention is very important. In order to better formulate relevant measures for specific groups, it is necessary to understand the anxiety symptoms of Chinese college students during the COVID-19 epidemic. However, in the existing research on the anxiety level of college students during the COVID-19 epidemic, there are differences in the research methods such as sampling methods, sample sizes, and anxiety assessment methods, and the reported results are also different (6%-80%). In order to better clarify this issue, we have made a systematic review and meta-analysis of the anxiety level of Chinese college students during the COVID-19 epidemic.

METHODS

Participant or population: Anxious college students during the COVID-19 epidemic.

Intervention: None.

Comparator: Anxiety is one of the important signs of mental health problems. Chinese college students are at high risk of anxiety, and the COVID-19 epidemic may exacerbate the anxiety symptoms of college students. However, most of the existing studies focus on reporting the prevalence of anxiety symptoms, and the inconsistent results of multiple studies make it difficult to plan mental health services for college students. The study aims to conduct a systematic review and meta-analysis to investigate prevalence of anxiety symptoms among Chinese university students amid the COVID-19 pandemic.

Study designs to be included: Investigate the anxiety of Chinese college students during the COVID-19 epidemic and report the research on the specific anxiety prevalence.

Eligibility criteria: The inclusion criteria for eligible studies are: (a) The prevalence of anxiety symptoms is reported in the article (b) The subjects of the study are Chinese college students, including overseas Chinese students (c) Anxiety symptoms are measured with standardized measurement tools (d) All studies It was carried out during the COVID-19 epidemic. We excluded the participants from non-Chinese college students, a mixed study that did not separately report the results of a group of college students, and a study that did not use standardized test tools for anxiety.

Information sources: We searched for research published between 2020 and April 2021, and searched in the following databases: Embase (ovid), APA PsycInfo, Medline, Pubmed, Cochrane Library.

Main outcome(s): 1.Using meta-analysis to quantitatively analyze the prevalence of anxiety during the COVID-19 epidemic, and provide a reference for future mental health conditions during the epidemic. 2.The overall prevalence of anxiety symptoms in Chinese college students is 25% (95CI:

21%-29%), which is higher than the prevalence of anxiety among ordinary Chinese residents during the COVID-19 epidemic. 3.Subgroup analysis shows that there are differences in the prevalence of anxiety among different groups. Female groups, overseas Chinese students, and later stages of the epidemic have a higher prevalence of anxiety, and medical-related majors have a lower prevalence of anxiety.

Quality assessment / Risk of bias analysis: We use the AHRQ Cross-sectional Research Quality Evaluation Scale to evaluate the literature quality of the included literature. The scale is compiled by the American Health Care Quality and Research Institute. There are 11 questions, each of which contains 3 answers, which are "Yes, "No", "I don't know." Choose "Yes" to score one point, "No" or "I don't know" score 0 points, and there is a reverse scoring question. The document quality evaluation score is the sum of all 11 items, and the score range is 0-11. The higher the score, the better the document quality evaluation. A score of 8 or more is a high-quality evaluation.

Strategy of data synthesis: The study used to extract the prevalence of anxiety mentioned in the article, and collected the basic information of the included literature through the data extraction table. Finally, the extracted anxiety prevalence is combined to draw a conclusion.

Subgroup analysis: Subgroup analysis shows that there are differences in the prevalence of anxiety among different groups. Female groups, overseas Chinese students, and later stages of the epidemic have a higher prevalence of anxiety, and medical-related majors have a lower prevalence of anxiety.

Sensitivity analysis: None.

Language: English.

Country(ies) involved: China.

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