An Overview of Depressive Disorder in Chinese Adolescents

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ABSTRACT
With the promotion of examination-based education in China, Chinese adolescents are studying hard and facing the pressure of comparison and competition with others. The number of places for continuing education and work provided by China is far lower than the demand, leading adolescents to bear the pressure of competition among their peers. In this social development environment, the incidence of depression among adolescents in China increases. Aiming at this phenomenon, we have carried out an in-depth study on this psychological disorder. Contemporary Chinese clinicians rely too much on adolescents' psychological evaluation and self-description. This paper understands the etiology of current Chinese adolescent depression from physiological factors, psychological factors, and sociocultural factors. It provides the differences in using the spiritual evaluation standard manual between China and the United States, CCMD-3 and DSM-5. The purpose is to let readers better understand the comprehensive field of depression. At the same time, to make readers not blindly believe in the psychological tools on the Internet. We also listed in detail the treatment methods of depression, such as medication treatment, psychotherapy, and physiotherapy, which allow more people to understand the fundamental treatments on depression. The Chinese government should promote the content related to depression and invest more money and time in relevant research. In addition, the Chinese government should train more psychological counselors and clinicians who can make high use of psychotherapy and physiotherapy.

Keywords: *Depressive Disorder, Highly Diagnosed, Chinese Clinicians, Chinese Adolescents*

1. INTRODUCTION

Depressive disorder is the most common mental disorder for modern people, and continuous and long-term awful moods categorize it. According to DSM-5, patients with the major depressive disorder usually have typical symptoms such as low mood, loss of interest and pleasure, low energy, fatigue all the time. Other common symptoms are decreased ability to concentrate, reduced self-evaluation, guilt and sense of worthlessness; self-harm and suicidal ideas or behaviors; sleep disorders; decreased or increased appetite. The episode of major depressive disorder is at least two weeks [1].

As the world pays more attention to depressive disorder, more and more people in China are willing to go to the hospital to check their mental state. According to the China National Mental Health Development Report (2019-2020), in 2020, the detection rate of depression among Chinese adolescents is 24.6%, of which depressive disorder is 7.4%.

The high detection rate of Chinese adolescents is caused by the differences in the diagnostic and statistical manuals of mental disorders and the culture of Chinese society. The authenticity behind the data shown in the China report is questionable. The reason is that when we were in the internship of the hospital, we discovered the phenomenon of clinical diagnosis in China; that is, clinicians rely too much on the psychological self-assessment form and trust the self-description of patients. Furthermore, Chinese adolescents think that depressive disorder is a kind of mainstream and it is worth showing off; they do not pay much attention to the adverse effects of medication treatment. Chinese adolescents will exaggerate the causes and symptoms when communicating with clinicians, who will not confirm this further.

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The primary purpose of this paper is to popularize the correct knowledge about the major depressive disorder, promote the positive thinking ability of young people, and raise the alertness of clinicians to lie patients.

2. LITERATURE REVIEW

2.1. The Differences in DSM-5 and CCMD-3

Both DSM-5 and CCMD-3 are the evaluation criteria of patients in psychiatry. First of all, DSM-5 comes from the United States. It contains an extensive range of clinical diagnoses of mental illness, which usually reflects changes in scientific understanding of these problems and their treatment. The changes of DSM-5 have had a significant impact on the work of doctors in various fields, and its changes largely depend on the progress of neuroscience, clinical and public health needs, which determine the classification system and standards proposed in DSM-5 [2]. The CCMD-3 system represents a global attempt to unify and retain the distinctive features of local applications. The more pragmatic middle-aged Chinese psychiatric leaders who lead the CCMD-3 working group reflect that they are less susceptible to the dominance of the most senior Chinese psychiatrist. They received training in the Russian psychiatric system, experienced the national humiliation of various periods that brought trauma to China, and used to be very cautious in adopting foreign technology. From this perspective, local classification systems (such as CCMD-3) may provide a necessary opportunity for reflection on North American psychiatrists. They just take the DSM-IV model for granted. Therefore, an in-depth study of CCMD-3 can understand contemporary Chinese thought and Chinese social reality.

These two diagnostic and statistical manuals of mental disorders are different and very helpful for treating depression. CCMD emphasizes the loss of libido. The patient population it targets is not emotionally high, and their activities are reduced. There are two different symptoms. However, there is only one type of patient targeted by DSM. Therefore, compared with the treatment range of CCMD, the scope of the target population is very narrow.

2.2. Etiology

The physiological, psychological, and social environmental factors are involved in the onset of depression. The elements do not work alone; it is emphasized that the interaction between genetics and environmental or stress factors and the timing of interactions significantly impact depression.

2.2.1 Physiological Factors

The physiological cause of depression may derive from genes. Everyone comes from the genes of both parents; the study from Wei et al. followed 800 young people in five years and concluded that the inherited genes might be short or long. The study found that 33.3% of people with one short gene became depressed after experiencing stressful life events, and a higher proportion of people with two short genes. Under the same conditions, two people with long genes are less prone to depression. Many other genes have been confirmed to increase the likelihood of depression, which also proves the association between depression and bipolar disorder and family inheritance [3].

Depression patients often have sleep disturbances, and their rapid eye movement sleep appears earlier than ordinary people [4]. Therefore, it is not difficult to understand why depression patients have a sleep disorder- difficulty falling asleep and/or easy waking up from light sleep. The brain's structure found that the cerebral cortex activity of patients with depression is lower than that of ordinary people. Although the brain's movement will be significantly reduced when depression occurs, the action of the amygdala sometimes increases [5]. It reflects that the individual will have a particularly vivid memory of adverse emotion-related events during the depression. In addition, depression patients are different from non-depressive patients in cortical responses related to perceptual environment enhancers [6]. This finding indicates that depression patients cannot perceive the pleasant experience in the environment.

The psychotropic hormones related to emotional patients are mainly serotonin, dopamine, norepinephrine. Serotonin and norepinephrine are significantly reduced during a depressive episode [7]. In a stressful environment, the stress hormones of depressed patients are higher than that of ordinary people, showing that depressed patients are less able to adapt to external pressure [8].

2.2.2. Psychological Factors

There is a close relationship between emotional state and psychological state. There is a lot of research on psychodynamic orientation, behavior orientation, and cognitive orientation on disorders related to emotion.

This is primarily due to the lack of praise in childhood and improper parenting style, leading to the inability to form a positive self-concept and being overly concerned about the views of others. Therefore, Freud believed that depressed patients were due to the inability to express anger, thus turning the anger towards themselves [9].

Stress will reduce the original positive reinforcement in life and make people unable to delight. When we are faced with pressure, our immediate response is to escape the stressful situation. If we fail to do so, we will feel helpless, slowly turning into despair, and finally, depression because of despair. In life, we will also

experience homelessness due to continuous frustration experience, and finally, enter a state of depression.

The cognitive theory of emotion-related mental disorders mainly focuses on depression. Cognitive orientation advocates that emotional distress comes from thinking problems, including negative thoughts and the process of how to think. Depressed patients often replay past negative experiences or feelings in their brains so that they have been indulged in depression. Furthermore, depressed patients lack positive thinking and hold negative views about themselves, others, the external environment, and even the future. Beck puts forward the theory of depression; he believes that depressed patients are accustomed to explaining things in the wrong way of inference [10]. According to the attribution theory derived from the three-dimensional model of Bernard Weiner, depressive patients will regard the small things in life as stable, internal, and uncontrollable big mistakes. This wrong attribution makes people fall into depression because of minor frustrations in life [11].

2.2.3. Sociocultural Factors

Economic and educational level indicators also affect the occurrence of depression. People with low socioeconomic status have a more complicated life and are more likely to feel depression [12]. Depression is closely related to the dilemma of interpersonal relationships. Improper interpersonal experiences in the past and interpersonal conflicts recently can induce depression episodes; it can be found from research that unsafe attachment relationships are prone to depression [13].

Under the high-pressure and high-intensity education environment, Chinese adolescents are under academic pressure and pressured by peer-to-peer comparisons. In China, parents, and teachers generally require adolescents to take licenses and become national civil servants to enjoy higher pensions and special medical care in the future. However, the number of civil servants in China is much fewer than the needs of adolescents. Chinese adolescents must continually increase their study time and continuously improve their learning efficiency to become civil servants. Nevertheless, depressive symptoms are more likely to appear when overused the body.

In the past decade, China has made advancements in science and technology, and the use rate of short videos among adolescents is extreme. The existence of short videos and video makers significantly affects young people's cognition. In the past five years, the phenomenon of short videos in China is that depression has been used as an excuse and a reason for escape by video makers. Whenever a video maker wants to attract attention or escape from reality, he will send a video to prove that he suffers from severe depression. Such behavior affects young people; Chinese adolescents regard depression as the mainstream culture and believe that they can evade responsibility and gain empathy as long as they suffer from depression. Therefore, many teenagers will show deceptive behaviors, which has led to a high increase in the number of Chinese adolescents diagnosed with depression. Adolescents who tell lies feel different from others and regard themselves as unique. Additionally, the medical system in China is also one of the reasons for the increase in the diagnosis rate of depression. Due to lots of adolescents telling lies and the high population of patients, and the low number of clinicians in China, clinicians have to diagnose in a short time, which leads clinicians to trust the psychological assessments and self-description from patients easily.

2.3. Impact

Patients with major depression tend to stay at home, draw the curtains to avoid light, and dare not go out. When dealing with relatives and friends, people with depression tend to be sensitive, sad, not accepting greetings, and unwilling to seek help from others.

According to the literature proposed by the Chinese Mental Health Journal, it is shown that adolescents with emotional problems, character problems, and social adjustment difficulties have a significantly higher incidence of self-harming behaviors than those without mental sub-health. There are significant differences in self-harm behavior and suicidal conceptions among adolescents with depressive disorders of different genders. Patients with self-harm behavior have more self-evaluated psychiatric symptoms, and self-harm behavior and suicidal concepts are related to stressful life events, parenting styles, coping styles, and attribution styles [14]. Adolescents with worse academic performance have a higher incidence of various types of abuse than students with good grades. Students with good grades may get more attention, understanding, and support from the family or school, and it is easier to get help even in an adverse event. Adolescents are affected by hormones in adolescence, a critical physical and psychological development period. Individuals' early bad environment leads to their poor ability to cope with destructive emotions, and it is easier for them to control emotions through self-harm behaviors [15].

Suicide has always been the focus of public attention. There are occasional thoughts of suicide in schools due to affection, schoolwork, and family. Although suicide is not a mental disorder, suicide reflects depression. The suicide rate among Chinese teenagers ranks first in the world. According to statistics released by the Beijing Medical Child Development Center, about 100,000 teenagers die by suicide every year in China, with an average of 2 suicide deaths every minute and eight suicide attempts. People who die by suicide often feel helpless and burdened by others. The brains of suicide

victims were dissected and found that the serotonin level in their brains was significantly lower than that of ordinary people. People with low serotonin are more than ten times more likely to commit suicide than the average person [16].

2.4. Treatments

Although more and more people suffer from depression in today's society, there are still many methods to treat psychological disorders.

2.4.1. Medication Therapy

First, medication therapy is a primary method to treat depression disorder. One of them is SSRIs, a class of medication typically used as antidepressants to treat major depressive disorder, and other psychological conditions. SSRIs are the most commonly used antidepressants. Compared with different types of antidepressants, they can alleviate the symptoms of moderate to severe depression, are relatively safe, and usually produce fewer side effects. Its rudimentary work theory is that medications treat depression by increasing serotonin levels in the brain. Serotonin is a chemical that transmits signals between brain nerve cells through neurotransmitters [17]. It also has another medication named SNRIs. SNRIs are sometimes used to treat other diseases, such as anxiety and long-term or chronic pain, especially neuralgia. If you have chronic pain and depression, SNRIs may help.

2.4.2. Psychotherapy

In addition, psychotherapy is also one of the ways to cure depression, such as cognitive-behavioral therapy (CBT) and interpersonal therapy. Cognitive-behavioral therapy is a standard therapy, which usually treats patients in the form of conversation. They work with mental health counselors in an organized manner and participate in limited meetings. CBT helps patients recognize inaccurate or negative thoughts to challenge situations more clearly and respond more effectively. Moreover, IPT is based on the so-called common factors of psychotherapy: therapists and patients participate in the treatment with empathy, help patients feel understood stimulate emotion, put forward clear reasons and treatment rituals, and generate successful experiences.

2.4.3. Physiotherapy

The definitive treatment is physical therapy. The first physiotherapy is electroconvulsive therapy (ECT). This is treatment under general anesthesia. A small current passes through the brain and deliberately triggers a brief seizure. However, many of the stigmas of ECT are based on early treatment, that is, the use of large doses of electricity without anesthesia, resulting in memory loss, fractures, and other serious side effects. But ECT is much safer now [18]. Although ECT may still cause some side effects, it now uses the current in the controlled setting to achieve maximum benefit with as little risk as possible. repetitive transcranial magnetic stimulation (TMS) is another physical therapy method. It is a non-invasive treatment method that uses a magnetic field to stimulate brain nerve cells to improve depressive symptoms. TMS is usually used when other depression treatments are ineffective. This method of treating depression includes sending repeated magnetic pulses, so it is called repeated TMS or rTMS. During rTMS treatment, place the electromagnetic coil on the scalp near the forehead. Electromagnets painlessly transmit magnetic pulses to stimulate nerve cells in the brain involved in emotion control and depression. It is thought to activate areas of the brain that are less active in depression. In a word, both methods can help patients with depression in physical therapy, but ECT still has risks and hidden dangers for patients' treatment.

3. LIMITATIONS AND FUTURE IMPLICATIONS

Citing the content of the past literature as the basis of this article, reviewing the literature can provide a theoretical basis for the high diagnosis rate of Chinese adolescent depression. However, due to differences in the scope of academic literature and random samples, relevant literature may also be limited. Most of the theories cited in the article come from past research in Western countries. The random samples of experiments are adolescents in Western countries, leading to differences in cultural backgrounds and customs. Even if the research reflects sociocultural factors that may influence human mentality and behavior, however, still lack consistency. Although some literature mentions the causes and treatments of Chinese adolescents, there is no in-depth research on gender differences. Moreover, the local differences in China are not considered, and different provinces have different cultural customs. Even the differences between China's urban and rural areas can be one of the reasons why adolescents suffer from a depressive disorder.

Because this paper is done based on previous literature, it is not a substantive experiment on Chinese adolescents. Therefore, there is a lack of substantive research and survey results. Also, the article is a literature review based on the phenomenon observed in my intern at a hospital in Wenzhou city; it is aimed at adolescents in China. It does not represent the causes of other age groups, and not every academic article meets the target of adolescents. Furthermore, the report focuses on the topic of depressive disorder, does not distinguish in detail the causes and treatments of different depressive disorder types. For example, it compares and contrasts the causes

and treatments of premenstrual syndrome depressive disorder and persistent depressive disorder.

The study results highlight the need for future research to use a representative sample. Future research should extend sociocultural, peer competition pressure, and technological advancement. Contemporary Chinese adolescents still live under the stress of peer competition even they turn into adulthood. Since the advancement of technology, the popularity of short videos has brought much influence on adolescents. Research on short videos should not be limited to how short videos affect the cognition and behavior of adolescents but also the age decline of short video makers. Many high school students choose to abandon their studies and rely on short videos for their livelihoods. The motivation of these adolescents dropping out of school is worth exploring.

The Chinese government should invest more in scientific research and experiments. Also, spend more time and money on the psychology of adolescents. The severe shortage of clinicians and psychological counselors in China, the difficulty of social worker training, and the almost blank status of vocational rehabilitation specialists make it challenging to establish a complete mental health service system. In China, insufficient knowledge of psychiatric rehabilitation practitioners, single rehabilitation measures, and difficulty in obtaining employment for rehabilitated persons have led to the biased coverage of the mental disorder rehabilitation system and uneven development between regions [19]. Therefore, China should cultivate more professional clinicians, psychological counselors, and social workers.

4. CONCLUSION

To summarize, physiological factors have a significant impact on the incidence of depression, such as heredity and changes in body index, and external factors can not be underestimated. In China, adolescents are under high pressure all year round. The psychological factors and sociocultural factors all affect Chinese adolescents, for example, adolescents in low economic and educational level families; high-pressure and high-intensity education environments force them to keep on studying. Therefore, the combination of different aspects has a considerable impact on adolescents to a very high probability of Chinese adolescents being diagnosed with depression. Even though more and more adolescents suffer from depression, there are advanced medical technology can reach the results of efficient treatments, such as medication therapy, physiotherapy, and psychotherapy. These treatments have long been popularized in our lives, providing more protection for patients' lives, and making more patients with depression no longer afraid of this psychological disorder. They will more actively cooperate with clinicians and counselors for treatment to get their mood and life on track.

Our article puts forward some different topics in scientific research and discovers various conclusions from others. By accessing any materials on the Internet, we compare the distinguishes between CCMD-3 and DSM-5. And it is pointed out that the two mental judgment manuals from different countries have different judgment criteria for depression.

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