

Analysis of Factors Influencing Depression in Early Adulthood

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Abstract. Depression is currently a very common mental illness, mainly manifested as feeling strong sadness and depression subjectively, which hinders normal life and social interaction. Depression can occur at any age. The occurrence of depression is the result of interaction among biochemistry, genetics, mental motivation and social environment. Early adulthood is an unstable period in which the psychophysiology of individual has just matured. The mental health in this period is of great significance to individuals and society. In this paper, we summarized the relevant factors and methods of intervention for depression in early adulthood.

Keywords: early adulthood, depression, adult attachment.

1. Introduction

In modern society, depression is a relatively common affective disorder. It can lead to persistent grief and loss of interest, affecting feeling, thinking and behavior of individuals. In severe cases, individual cannot perform daily activities with serious desperation, suicidal mood and behavior. More than 350 million people worldwide are currently suffering from depression. Depression has received more and more attention as a common mental illness. According to statistics, the lifetime prevalence rate of depression is as high as 15%, and 15% of patients are likely to commit suicide due to severe depression.

Depression can be divided according to many criteria. According to the age of first-onset depression, it can be divided into Early-onset Depression, Depression in adulthood, and Late-onset Depression. Early-onset depression refers to depression that occurs in minors (mainly during childhood and adolescence). Late-onset Depression focuses on first-onset depression that occurs after the age of 50. Depression in adulthood occurs between early-onset depression and late-onset depression. This paper focuses on the situation of depression in early adulthood. We define early adulthood as a college stage, so this study mainly focuses on some relevant factors and treatment methods of first-onset depression in college students.

The physiological structure of college students has basically developed and the brain has matured. However, college students are in the early adult stage. Most people's psychology is still in a stage of immature maturity with strong self-awareness and rich inner feelings. At the same time, they are weak in terms of responsibility consciousness, psychological endurance and anti-frustration ability. In the current era of information explosion, college students are not only very dependent on the Internet, but also vulnerable to the influence of various words and deeds. At this stage, mental health is an important factor to evaluate the quality of young people. How to guide college students in this period to shape a healthy psychological state is a hot issue not only in the psychology researches but also in the education ones.

2. Physiological Factors of Depression in Early Adulthood

The causes of depression in whatever period are complex because it is not determined by a single factor. Individual genes or other physiological factors may form a depression-susceptible environment, making this group more likely to suffer from depression. These factors include genes, gender and neurotransmitters. Depression has a high heritability, and the proportion of depression in offspring of depressive patients is three times or more than that of healthy offspring [1] Family genealogy studies have shown that family members with depressive symptoms are more likely to affect other people in the same family. Besides, the closer the blood relationship is, the higher the

incidence rate — the proportion of first-degree relatives of patients with depression suffering from depression is as high as 10% to 15% and the morbidity rate is much higher than other non-first-degree relatives. This suggests that a closer blood relationship with depressed patients increases the risk of disease [2]. Another physiological factor in depression is gender. Women are more likely to suffer from depression than men, and their incidence is twice that of men. In addition, genetics and gender have an interactive effect on depression. The study found that in the history of family mental illness, children with parents, especially mothers in the case of suffering from depression were at higher risk of depression [3]. In addition to heredity and gender, many researchers believe that the formation of depression is related to neurotransmitters in the brain and abnormalities of receptors. These neurotransmitters include serotonin, dopamine and norepinephrine etc.

3. The Relationship between Individual Experience and Depression in Early Adulthood

Most of the depressions induced by physiological factors are characterized by early onset. Depressive patients who are sick for the first time in adulthood are more affected by individual experience and social environment. Studies have found that bullying experiences in adolescence can affect depression in early adulthood. Bowes et al. analyzed data on 3,888 participants who were bullied and suffering from depression to determine the link between bullying during adolescence and depression in adulthood. Participants completed a self-reported questionnaire that included bullying during adolescence and the internationally recognized standards for depression in adulthood. Among them, 683 young people are often bullied before the age of 13(at least once a week) and their chance of suffering from depression in adulthood is 14.8%. 1,446 young people are bullied 1-3 times every 6 months before the age of 13 and their chance of suffering from depression in adulthood is 7.1%. The probability of young people who had not been bullied during adolescence suffering from depression in adulthood is only 5.5%. 10.1% of young people who are often bullied have been suffering from depression for more than 2 years. There are only 4.1% of young people who have not been bullied suffering from depression for more than 2 years. Overall, 2,668 participants demonstrated a link between bullying and depression. Other factors can also lead to depression, such as childhood bullying, psychological and behavioral problems, family reorganization, and stress in life. Even when these factors are taken into consideration, the risk of people who are often bullied during adolescence suffering from depression is twice that of the ones who are not bullied. Moreover, this link does not vary by gender.

In addition, researchers have found that there is a close relationship between stress and depression. Stressful life events and individual experiences increase an individual's susceptibility to depression. This stressful life event can even be traced back to early life. The bad experiences in early life are closely related to adult behavioral disorders and cognitive impairment. Mothers who have experienced major traumatic stress events during pregnancy may affect fetal brain development, increasing the risk of children's mental illness in adulthood, especially affective psychosis such as depression [4]. Animal experiments have shown that rodent mother rats exposed to stressful events during pregnancy may cause dysfunction of the HPA (hypothalamo-pituitary-adrenal) axis, thus increasing the anxiety-like and depression-like behavior of offspring in adulthood and this effect is more pronounced when exposed to stress in the third trimester [5]. Restraint stress in the second and third trimesters can also present offspring with significant depression-like behavior [6]. Pawlby et al. longitudinally tracked 151 pairs of maternal and child depression and found that pregnant women with depressive symptoms during pregnancy increased the risk of their offspring suffering from depression [7]. Studies have found that if a mother was exposed to stressful events such as the death or burial of her husband during pregnancy, the risk of her offspring suffering from mental illness would be increased. Lu et al. found that if fetuses experienced a group of earthquake events in the fetal period, the detection rate of depression was 2.2%, which was higher than the average level of depression check rates at the same time. This indicates experiencing earthquake stress in the fetal or

infancy period has a long-term effect on depressive symptoms, increasing the risk of depressive symptoms in adulthood.

4. Adult Attachment and Depression in Early Adulthood

Depression in early adulthood is inseparable from an individual's life experience, stress or traumatic events. However, the mechanism between individual experience and depression is not very clear. According to the researchers, adult attachment may play an important mediating role between these individuals' experiences and depression.

The concept of adult attachment was first proposed by Hazan & Shaver (1987), who believed that attachment could occur not only between the infant and parents, but also between close friends and partners. Whether an adult feels secure in his adult relationship may partly reflect his early childhood attachment experience and current evaluation of that attachment experience. The attachment characteristics of childhood individuals will still be revealed after adulthood, so adults should have the same attachment styles classification as children, including Avoidant, Secure and Ambivalent/Resistant. These three types of adult proportions closely match the proportion assignments of infants.

Bartholomew et al. proposed that the type of adult attachment could be distinguished according to different combinations of self-component and other components and thus four patterns of adult attachment could be obtained: Secure, Preoccupied, Dismissing and Fearful [8]. Secure individuals have positive self-models and positive models of others. They believed that they deserve to be loved and others can be trusted. They can have intimate relationships with others and can also maintain self-independence. Preoccupied individuals have negative self-model and positive models of others. They think they are worthless and incompetent, but others are acceptable. Therefore, they always try to win the acceptance of others to support their self-image. Dismissing individuals have positive self-model and negative models of others. They have positive views of themselves, thinking that others are unreliable and excessively pursue independence or control others. Fearful type individuals have negative self-models and negative models of others. They are inferior and do not trust others, longing for intimate relationships but maintaining interpersonal distance for fear of being rejected.

Insecure attachment adults, though slightly different, share a common trait of fear of being rejected. They may gain the attention and intimacy of others through the act of ingratiation. If they are neglected, they will doubt their own value. People around will feel pressure and dare not show indifference to them. Over time, people around will try to avoid interacting with them. They may also avoid people because they are afraid of being rejected. Even if someone approaches them, they believe that others will leave them at any time. Therefore, they avoid paying their own feelings or hide their feelings. They are full of distrust, and because of this distrust and indifference, others are often no longer intimate with them. This further instead confirms their point of view that others will hate them and then leave them after they have been in contact with each other for a long time. In their internal working mode, they believe that intimacy should be passive and cold. Only such relationships can make them feel comfortable. Therefore, they will try their best to seek others of their own kind and establish a "cold and intimate relationship" with each other.

A large number of studies have shown that adults with insecure attachment patterns are unable to integrate and assess the memory of past experiences and the meaning of past experiences. Besides, the type of adult attachment is related to depression. Sibcy and Gary surveyed 2022 pairs of patients with depression and found that only 10% of them belonged to secure attachment. Yang et al. indicated that for college students, Preoccupied and Fearful attachment styles had significantly higher depression scores than Secure and Dismissing styles. The difference in research results may be due to differences in cultural backgrounds. Fearful style college students are prone to social anxiety in their interactions with people because of their early relationship experience. They don't trust people and are afraid of others' rejection. College students often communicate with their classmates in addition to studying on college campuses so this kind of social activity itself is prone to bring them negative emotional experiences such as anxiety etc. After being frustrated, they tend to be depressed

and weak, and have a sense of hopelessness in life, inducing depression. Although Dismissing style college students are easy to avoid interaction and deny their desire to be close because of their early experiences, they advocate independence and have positive comments on themselves. Relatively speaking, they will avoid some negative emotions such as nervousness anxiety and depression, caused by social activities.

5. Intervention and Treatment of Depression in Early Adulthood

Currently, interventions for depression include both drug intervention and non-drug interventions. Drug interventions mainly use SNRIs for treatment, including venlafaxine and mirtazapine. Drug therapy is necessary for patients with depression in early adulthood who have already been diagnosed. However, due to the complex causes of depression and since early adulthood is a growth stage in which mind and body are very sensitive, most patients with depression should combine drug therapy with psychological intervention in addition to drugs. Current methods of psychological intervention are rich and varied, including Cognitive-Behavioral Therapy (CBT) for individuals and Attachment-Based Therapy (ABFT) for families etc. Cognitive-Behavioral Therapy believes that irrational beliefs and bad cognition of patients with depression can be altered by changing their attitudes and perceptions of things. At present, there are three main modes of cognitive behavioral therapy technology: the first is cognitive recombination therapy; the second is coping skills treatment; the third is problem solving treatment. Attachment-Based Therapy is an empirically supported family therapy based on attachment theory. ABFT aims to reveal the experience and relationship processes that undermine family trust to achieve the goal of restoring attachment and promoting autonomy. (Diamond et al., 2016).

Electroconvulsive Therapy (ECT) and other brain stimulation therapies may be an option for patients with severe depression who are not responding to antidepressants. ECT has a long history of use. It acts on cerebral cortical cells with a certain current, inducing them extensive spontaneous discharge and causing epileptic seizures of systemic convulsions. This therapy has a good effect on depression, but the brain may have hypoxia because of extensive discharge of brain neurons caused by epileptic seizures in treatment. In addition, Transcranial Magnetic Stimulation (TMS), a non-invasive brain stimulation method, has been approved by the US Food and Drug Administration for clinical patients. Transcranial Magnetic Stimulation mainly uses a variable magnetic field to stimulate the cerebral cortex or distant cerebral cortex, making brain produce induced current to depolarize the nerve cells for therapeutic purposes. Since the magnetic signal of Transcranial Magnetic Stimulation does not attenuate when passing through the skull, it can be more effective on the brain nerve and is currently an effective method for treating depression [9].

6. Conclusion

The causes of depression include many aspects. Various factors interact and influence with each other. In addition to the factors mentioned in this paper, many other factors need to be further studied. Although early-onset depression and late-onset depression have received widespread attention from researchers, more attention should focus on the first-onset depression in early adulthood, characteristics of this kind depression need to be further clarified to distinguish from other types of depression. The current treatment technology is mainly based on drug intervention, but because of the instability and particularity in early adulthood, it is necessary to pay special attention to the negative effects of drug treatment. Therefore, multiple means should be adopted to jointly reduce the depression level in early adulthood, promoting the mental health of adults.

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