

Family System and Depression: Theoretical Perspectives and Intervention

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Abstract. Depression is a serious mental illness with persistent and significant low mood and cognitive dysfunction as its core symptoms. A family system refers to a relatively stable system that is composed of tangible and intangible rules generated by the interaction of inner members. The whole system is more than the sum of its parts. Driven by an increasing number of researchers and therapists studying family-based systematic treatment of depression, the related field has made great progress in recent years. This article reviewed recent research on depression therapies that target families in need. In the second part, regarding the theoretical progress in the family system in patients with depression, the relationships between family roles, self-differentiation, and depression were discussed respectively. In the third part, regarding the clinical evidence of family therapy for depressive symptoms, the effectiveness and prospect of the specific systemic treatment model with families as the intervention objects were analyzed from four aspects: system change, attachment relationship, family cohesion, and personal cognition. In terms of shortcomings and future direction, the cross-sectional nature of the experimental design, the limitations of the measurement method, and the difficulty of controlling the experimental variables, etc., put forward higher levels of reliability, validity, and empirical requirements for future research in related fields.

Keywords: family system, depression, attachment, internal working model.

1. Introduction

Depression is a mental illness with a high prevalence rate, high disability rate, and high mortality rate, which is mainly associated with major stress events or family inheritance. Depression and suicide are serious public health issues that affect not only adolescents but also their families and communities [1]. According to the World Health Organization in 2023, approximately 700,000 people worldwide die each year from suicide caused by depression. In the field of psychopathology, more and more researchers are studying the family as a system. On the one hand, the family is a key influencing factor in the individual's psychological development process and the level of depression. On the other hand, the family is a significant living place and support system for depression patients.

As a subsystem in the social system, the family is the basic unit of society, and each family creates a unique interpersonal system. Family system refers to a system in which members with kinship relationships (such as husband-wife, parent-child, brother-sister relationship, etc.) interact and influence each other, forming a whole that is more than the sum of its scattered parts [2]. During the family life cycle, families inevitably need to face and solve various tasks that constantly arise, including role changes or major changes such as the death or separation of family members. To cope with these tasks, families need to make choices and give solutions based on continuous adaptation and adjustment. Accordingly, the choices they make and the solutions they attempt are shaped by their shared beliefs as individuals, families, and wider society. The family system comprises recursive combinations of tasks, attempted solutions, outcomes, and beliefs.

While each family member does seem to make autonomous decisions about their own lives based on their own unique beliefs, the domesticity to which they belong is characterized by repetitive, predictable patterns of behavior, suggesting that the image of the nuclear family still dominates [3]. It reflects an individual's behavior, expectations, and feelings. As an internal psychological structure and a common form of psychopathology, attachment refers to the special emotional relationship between infant and caregiver due to the interaction. This emotional connection will accompany the individual throughout their life by affecting the shaping of their personality, identity, emotional

function, susceptibility to psychopathology, etc. When individuals with depression try to get rid of the shackles of depression by leaving their original families or only participating in cognitive therapy, most of them cannot achieve their ideal curative effect. Bowlby's internal working model refers to the mental model or representation of the world, others, self, or interaction with others that infants develop and internalize during early parent-child interactions. Based on this, Bartholomew and Horowitz categorized adult attachment styles into four types: secure attachment, preoccupied attachment, fearful attachment, and apathetic attachment.

Stierlin's dispatch theory, Bowen's family system theory, and Boszormenyi-Nagy's family ledger theory are the earliest psychotherapeutic models that focus on family relationship patterns from an intergenerational perspective [3]. Foerster distinguished the development stages of the system theory model in psychotherapy from the perspective of cybernetics. Primary cybernetics emphasizes observing and influencing the system from outside the system and objectively describes the family from the perspective of function and maintenance of equilibrium or homeostasis. In primary cybernetics, therapists are largely considered to be able to accurately diagnose, identify, intervene in family problems, and modify the unhealthy outcomes caused by those problems. Secondary cybernetics argues that the family system should not be viewed as an externally regulated object, but as a self-created, independent subject in which all members of the system have their views of reality and descriptions of the family. In secondary cybernetics, the therapists' beliefs about their role undergo an important shift—focusing not only on analyzing family dynamics but also on the nature of interactions between themselves and the family [3]. Therapists at this stage chose to work with family members to reframe healthy meanings in life and help families feel less resistant to the new paradigm. Both stages consider causation to be a dynamic process that occurs in a continuous cycle over time.

From a conceptual point of view, it seems easy to distinguish the meaning of primary cybernetics and secondary cybernetics. However, in practical applications, therapists often encounter many difficulties in determining which type of cybernetics a patient's behavior or cognition belongs to when choosing the most beneficial treatment plan. However, it is precisely the complex relationship between the two cybernetics that makes family therapy based on cybernetics appear inclusive and flexible. Through integrating the recent research results and work related to family systems and depression, and by understanding the latest research progress and level, this article attempted to analyze the existing deficiencies and points out possible research directions and plans in related fields in the future.

2. Theoretical Progress in Family System and Depression

Depression is a chronic mental illness with anhedonia as its core symptom, which brings long-term mental losses and financial burdens to patients. The family system refers to a whole that surpasses the sum of the scattered parts, where a social group is intimately connected based on marriage, blood relationships, and a certain economic basis. The family is the initial environment for the formation of individual sociality, and different family structures and the family systems they maintain play an important role in the level of individual mental health. For example, individuals whose self-awareness and social functions have not been fully developed, and who are unable to fulfill the needs of their social roles, usually have the onset of depression due to specific negative events in the social field such as family conflicts, death of relatives, and relationship breakdown. Family-based psychological intervention therapy helps family members understand how their family system works and rationally reflect on their family roles, which may help reduce the level of depression in depressed members of the family.

2.1. Family Roles and Depression

Family function is the effectiveness of family systems operating. A well-functioning family system can effectively handle family members' emotional connections, family rules, and family

communication. This also means that a healthy family system can adapt to and promote the development of the family and its members and respond to various internal and external emergencies. Nevertheless, in some family systems, parents or children may find themselves voluntarily or involuntarily adopting certain roles, such as the scapegoat, lost child, hero, etc. Among them, the “scapegoat” is a member who is frequently blamed for problems that most likely have nothing to do with him or her. The “lost child” is the member who is often emotionally sensitive and may feel neglected in the family system. Wrong role adoption or a high degree of rigidity in a certain role may lead to family dysfunction. Childhood experiences with family dysfunction may cause children to be more likely to fall into certain difficult behavioral patterns and roles, which then have negative effects on the psychological and social adjustment of future life. For example, the scapegoat may experience more severe abuse than other family members, making it difficult to connect with others on a genuine level and thus lead to depression and self-sabotage. In a study conducted by Zagefka et al., the relationship between individuals’ different roles in their original family (especially scapegoat and lost child) and family dysfunction, as well as the impact on their future performance of depressive symptoms was researched by designing two studies targeting young and elderly individuals respectively [4]. In both studies, participants were asked to answer 3 questionnaires that retrospectively assessed their roles in the original family, family dysfunction, and current depressive symptoms. The two studies found that individuals reported having played the lost child and scapegoat roles in the original family were linked to dysfunction in the family. It is important to note that in both studies, the children taking the roles of lost child and scapegoat were associated with more depressive symptoms in adulthood, which explained the positive correlation between family-of-origin dysfunction and individuals’ unhealthiness in adulthood (e.g., depressive symptoms).

Since a dysfunctional family can cause various psychological problems among family members and lead to family crises, the reason for the maintenance of a dysfunctional family system is worth exploring. Triangular relationship is the basic concept of family therapy, which is manifested as the relationship structure between parents and children in the family system. The more chaotic and disorderly the family, the greater the number of triangular relationships, and the stronger the active state of each relationship, so that it is difficult to be noticed or changed during the family’s operation. An unhealthy triangle is pernicious and sacrifices the mental health of the third person involved in the tension between the two. For example, in families with long-term conflicts between parents, children may be forced to choose to “take sides” and be more vulnerable to loyalty conflict. An anxious growth environment affects the progress of children’s self-differentiation, manifested as a lack of individual autonomy, high level of emotional isolation, weak ability to adapt to pressure, etc., and eventually develops into depression. Parental differential treatment (PDT) refers to the unequal educational methods shown by parents in terms of affection, investment, or discipline for different children in family life. Children who receive less attention exhibit more emotional and behavioral problems. Based on Bowen’s theory, Ponappa et al. estimated actor-partner interdependence to investigate the associations between PDT, the triangular relationship between parents and children, sibling warmth, and individual depressive symptoms using a set of questionnaires [5]. The actor interdependence is assessed by individual perception and the partner interdependence is assessed by sibling’s perception. The results showed that being triangulated is positively related to the perception of PDT, but when one of the siblings sensed triangulated, his or her sibling would have a lower perceiving level of PDT. Each sibling’s perception of PDT is negatively related to his or her perception of sibling warmth, and the perception of warmth is related to the reduction of depressive symptoms he or she experienced in adulthood. For both siblings, the higher the PDT level they perceived, the lower the level of sibling warmth they had, and the more depressive symptoms they reported. The experimental results supported the feasibility of detriangulation in helping to reduce depressive symptoms in individuals.

2.2. Differentiation of Self and Depression

Self-differentiation is the core concept of Bowen's family system theory, which refers to the individual's ability to distinguish between reason and emotion. Interpersonal conflict is an individual's perception of a general tendency to experience interpersonal conflict in their lives, as well as their reports of negative social interactions with others. Highly differentiated individuals could balance the relationship between emotion and reason, that is, they are not only able to produce strong emotions and spontaneous behaviors but also exercise self-restraint at a reasonable level and look at things objectively. Therefore, highly differentiated individuals can resist the impact of emotional impulses on themselves. Individuals with a low degree of self-differentiation have difficulty separating reason from emotion and will react more emotionally and lack objective thinking. Taking anger expression (i.e., expressing anger toward the outside physically or verbally, including anger suppression) as an example, compared to individuals with a high level of differentiation, individuals with a low level of differentiation may be aware of but choose to suppress and internalize feelings of anger (i.e., emotional cut-off), or may report more physical conflicts and verbal aggression (i.e., emotional reactivity). Both emotional cut-off and heightened emotional reactivity may lead to higher levels of interpersonal conflict and depression. Based on Bowen's family system theory, Choi and colleagues took American college students as samples and asked them to fill in questionnaires to investigate how self-differentiation affects anger expression and related outcomes, such as depression and interpersonal conflict, by studying the two aspects of self-differentiation [6]. They draw conclusions that, to begin with, the outward expression of anger could play a mediating role between interpersonal conflicts and emotional reactivity. Furthermore, the internally expressed anger completely mediated the relationship between depression and emotional cutoff. Last but not least, for those with poor differentiation who emotionally withdrew themselves to cope with their relationship anxieties, suppressed anger played a significant role in explaining the onset of depression. This study provided an outlook of clinical strategies regulating emotions (e.g., anger expression patterns) and establishing self-differentiation problem-centered coping styles to help improve customers' ability to solve their depression and interpersonal problems.

As a type of narcissism, vulnerable narcissism is usually characterized by a strong confrontational personal style and indifference to the rights of others, as well as introversion, over-sensitivity, lack of competence, and negative emotions. The development of the emerging self requires an idealized self-object. Defects in the idealization or extreme disappointment in the idealized image will hinder the individual's psychological differentiation process. Low levels of self-differentiation will increase the individual's risk of depression and interpersonal problems. Assuming that a person has a vulnerable narcissistic personality, on the one hand, he/she may have unstable goals due to difficulty in maintaining internalized ideals and motivations. On the other hand, the tendency to hide himself/herself from others may hinder the formation of social support and the acquisition of corrective feedback about his/her limitations. Constant disappointment in oneself and others, and a "perpetual" struggle with relationships with idealized others lead the vulnerable narcissist to repeatedly affirm negative self-evaluations and to fall into a cycle that reports depression, interpersonal conflict, and symptoms of vulnerable narcissism (i.e., inexcusable and lack of humility). To investigate the association between self-differentiation, vulnerable narcissism (VN) and humility, forgiveness, and depression, Sandage et al. took 162 graduate students as samples [7]. The research results indicated that to begin with, self-differentiation mediated a negative correlation between VN and forgiveness and humility. Next, there was a positive correlation between VN and depression among all predictive factors except for defensive idealization and twinship. Given the role of self-differentiation as a mediator for these associations, it may be important to assess changes in relationship patterns with the original family or other important relationships (i.e., idealization dynamics and important sources of relationship disappointment).

3. Clinical Evidence of Family Therapy for Depression

Systemic therapy, together with psychoanalysis, cognitive behavioral therapy, and humanistic therapy, are known as the four major internationally recognized schools of psychotherapy. The “system” that psychotherapists refer to is the mutual communication between various members of the social system and the physiological and psychological processes (such as thinking, emotions, diseases, etc.) caused by these communications. It should be noted that this is not an actual system, but the way an observer describes a certain field of reality, including circulation, communication, and system-environment boundaries. From the perspective of philosophical epistemology and methodology, systemic therapy is a fourth trend of thought that is different from the three previous mainstays of psychotherapy —when dealing with problems and pain, systemic therapy explains the individual’s encounters and behaviors from the relationship between the individual and other members, rather than placing the initial focus on a person’s internal state and motivations. Based on this, systemic therapy uses systems thinking and communication methods to help seekers create social conditions that are conducive to change according to their wishes and resources, so as to achieve the goal of solving their life problems (e.g., depressive symptoms). There is a variety of evidence supporting family systems-based treatment options for individual depression.

Systemic changes in families related to parental involvement, group activities, peer support, and encouraging parents to show openness to negotiation and compromise in ways that are more attentive to adolescents’ developmental needs. Poole et al. described a structured multi-family-based manual intervention method for treating adolescent depression in their literature: Behaviors Exchange Systems Therapy for adolescent depression (BEST MOOD) [8]. Combining elements of psychological education and attachment theory, the sessions are divided into two parts according to the target audience. The first part is the parent component, which helps parents rethink their approach profoundly, communicate about their parenting style directly, and experiment with new ways of thinking and behaviors that are appropriate for their own family. The second part is the youth component, which invites the adolescent and their siblings to participate with their parents halfway in the program to solve the depressive symptoms of the adolescent and work on the dyadic interactions within parent and adolescent subsystems [8]. Evaluations completed to date indicate that the family systems-focused BEST MOOD program works well for depressed adolescents and their families. In families that have received the BEST MOOD intervention, parents have shown greater improvement in their mental health symptoms, self-care abilities, and parenting behavior confidence. As for adolescents, their enthusiasm for actively participating in treatment has increased, their autonomy has increased, and their motivation and actions to solve mental health problems have become more obvious. As can be seen, therapies centering discussion of family roles, mental health literacy, and formulation of family goals could play an effective positive role in promoting parental vision and leadership, family communication patterns, boundary setting, stress management techniques, fostering family cohesion, and further achieve the goal of reducing individual’s depression level.

Suicide is a common complication of depression, and patients with depression have a higher risk of suicide than the normal population. Therefore, to explore the effectiveness of one depression therapy, the changes in suicidal tendencies and behaviors of patients before and after participating in the treatment could also be considered variables. In a study on the effectiveness of Attachment-Based Family Therapy (ABFT) compared with a controlled group (treating with interpersonal psychotherapy, i.e., IPT, or cognitive behavioral therapy, i.e., CBT) in reducing suicidal ideation in adolescents with clinical depression, Waraan et al. targeted 60 adolescents (13-18 years) with severe depressive disorder and conducted a 16-week randomized controlled trial, among which participants were assigned to the ABFT group or the controlled group and completed a set of questionnaires [8]. It can be concluded that there was no significant correlation between the fixed effect of treatment allocation. In other words, there was no significant difference in reported suicidal ideation levels between participants receiving ABFT and those receiving other treatments. Although both groups of adolescents still reported significant levels of suicidal ideation at the end of treatment (clinical level in the controlled group and slightly below clinical level in the ABFT group), the study results should

be carefully interpreted in highlighting the limitations and advantages —unlike commonly held beliefs, when compared with ABFT, the gold standard therapy do not result in better psychological treatment. As ABFT is a therapy model that focuses on re-establishing trust and communication between children and parents, as well as assisting parents in becoming better carers, it could also be speculated that therapies that intervene in depression and suicidal tendencies by improving family attachment relationships, or the internal operating model of the family system are promising.

From the perspective of family systems theory, family attachment focuses on the role of dual subsystems. Family cohesion, as it is affected by factors such as economic conditions, family member relationships, and family habits, reflects a wider coverage in the system. The antagonistic family soft environment is closely related to the onset and maintenance of depression. As an indicator of family soft environment, family cohesion is negatively related to depressive symptoms, and family conflict and sense of control are positively related to depressive symptoms. Suppose there is a father or mother in a family who is extremely emotionally unstable: Firstly, continued alienation or tension in the parental relationship will make the children feel extremely anxious and uneasy. Secondly, the emotionally unstable father or mother may show a stronger desire to control their children, seriously hindering the formation and development of their children's healthy personalities. When an individual feels unable to cope with external pressure and produces corresponding negative emotions, it is exactly in line with the symptoms of depression. Based on data from a randomized controlled trial comparing the efficacy of ABFT with Family enhanced non-directive supportive therapy (FE-NST), Ibrahim et al. explored whether adhering to core relationship interventions in the caregiver-adolescent attachment tasks of ABFT by therapists can help change the outcomes of treatment (depression, suicide, and family function) [9]. The study mainly found that in the first place, attachment repair adherence significantly predicted suicide and behavior. In the second place, there is no significant correlation between adherence and the post-treatment outcomes of family conflict and family cohesion. In the third place, attachment repair adherence was related to the reduction of post-treatment depressive symptoms. The research findings revealed several correlations between therapist adherence and outcomes in the attachment repair process and provided supporting evidence for family cohesion as a mechanism of change in the ABFT attachment task.

For individuals with cognitive problems (i.e., individuals have wrong and distorted cognitive concepts about things; Beck) and negative cognitive patterns (i.e., tending to interpret and attribute negative events; Abramson), negative emotions can easily induce negative thoughts related to themselves and lead to negative interpretations of results and the future (Teasdale), thus having a higher prevalence of depression. Given that the three therapies discussed above all achieve the purpose of interfering with depressive symptoms by actually changing family system relationships (i.e., requiring/allowing the presence/participation of family members of depressed individuals during the treatment process), then additional exploration of the “can” of obtaining effective curative effect on depression only by changing the patient's internal working model, rather than necessarily seeking systemic change is essential. To validate the effectiveness of Internal Family Systems (IFS) therapy as an alternative to pharmacotherapy, IPT, CBT, or certain combinations that are effective in treating depression but have not benefited a significant portion of those receiving treatment, Haddock et al. compared IFS treatment with a controlled group (treating with IPT or CBT) in female college students by recording and using a set of questionnaires [10]. The results demonstrated that depressive symptoms both decreased in the IFS group and the control group. Similar to ABFT, the conclusions were drawn in experiments comparing the treatment results of IFS with “gold standard” treatments, indicating that IFS may be a promising treatment mode for depression. Because the treatment does not involve changes in the family system and social support, its effectiveness also confirms the feasibility of a depression treatment plan that only changes the patient's internal working model.

4. Conclusion

The family plays an important role in the physical and mental development of the individual. A healthy and happy family helps to cultivate the individual's enterprising spirit, self-control ability, and emotional stability ability, making it easier to form conscious behavior and facing a lower risk of depression. The influence of the family system on the individual's psychological development is complex, extensive, and far-reaching. Childhood experiences with family dysfunction make youngsters more prone to adopt difficult behavioral patterns and roles, which have a negative impact on their future psychological and social adjustment. Regardless of whether the unhealthy nature of the family structure is recognized or not, the existing family structure could be maintained by the triangular relationship in the family. Individuals who have been in a triangular relationship for a long time often have difficulty getting the opportunity to fully differentiate themselves due to long-term worries about family relationships and the family future. As a result, during adolescence and adulthood, they are reported to have more difficulties in distinguishing reason and sensibility, emotional control and expression, handling interpersonal relationships, etc. These are not only precipitating factors but also symptoms of depression, making depression difficult to treat in a vicious cycle of cause and effect, causing patients to suffer long-term mental and economic losses. Based on the close relationship between the family system and depression, more and more recent studies testified the effectiveness of family therapies on reshaping the family structure, changing family roles, improving attachment relationships, and enhancing family cohesion, etc. through experiments and effective and reliable data analysis. At the same time, there is also evidence of efficacy and promise for therapies that target only the internal model of depressed individuals. To sum up, family-based systematic therapy has been recognized, researched, and applied by more and more psychologists and therapists, showing vigorous vitality and continuous creativity.

Although there are many scholars and clinicians focused on family-based systemic therapy for depression and made considerable progress in its theory and practice, there are still some shortcomings overall. First of all, many research designs that used model analysis were cross-sectional, and might not be generally applicable to groups of people with different demographics, such as sex, age, occupation, and race. As a result, the applicability of the research results might be only limited to those samples used in the experiments, affecting the generalizability of experimental results. Plus, as the researchers only used family therapy to simply intervene on a certain problem or the measurement tools selected/designed had limited measurement capabilities. Several empirical studies lacked research on other influencing factors and potential intermediary factors leading to the problem and in-depth tracking, thus leading to measurement errors. Moreover, the high complexity of the social composition of the treatment group and the differences and variability of individual identities in the group put forward extremely high integration requirements for treatment focusing on the family system. Last, some studies faced problems that were difficult to solve, such as having uncontrollable variable factors in the research process (e.g., patients with depression could not recall accurately due to memory impairment, resulting in risks of false memories being recorded as facts), affecting the inference of causal relationships. Given the limitations of existing research discussed above, future researchers can select one or more appropriate theories, methods, and technologies to integrate and improve based on the different needs of different families and individuals. By making the therapy more flexible, effective, and empirical, patients with depression could increase their agency to determine their most satisfactory treatment method. It will help them minimize the suicide rate, reduce the risk of recurrence, and restore their normal functions.

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