Etiology and Treatment of Major Depressive Disorder

- From a Psychodynamic Theory Perspective

Mengxin Cai^{1,a,*}

Abstract: The purpose of this review article is to give an overview of how Psychodynamic Theory examines the etiology of Major Depressive Disorder and their corresponding therapeutic treatment. Method used in this article is literature review from Google Scholar and Elton B. Stephens Company (EBSCO) host database provided by The Ohio State University. Result explains the evolution of Psychodynamic Theory from Drive theory, to Ego Psychology, Object Relations, and Self Psychology. Moreover, the mechanisms and procedures of the therapies with good therapeutic effects are reviewed and analyzed. Specifically, psychodynamic therapy including Mindfulness-based Therapy, dream analysis, inkblot therapy, and Cognitive Behavior Therapy. As psychological therapy is test-effective, psychological approaches from interpretive pole to supportive pole with different modern therapy such as Cognitive Behavior Therapy and Mindfulness-based Therapy are being discussed. Risk factors that may lead to countertransference and discordant therapeutic relationships are presented. The present study provides suggestions for future research focusing on comorbidity of mental disorder. For treatment practice, this study emphasizes on culture difference and individual differences.

Keywords: major depressive disorder, psychodynamic theory, psychodynamic therapy

1. Introduction

Major Depressive Disorder (MDD) is a clinical diagnosed psychological disorder that affects millions of people worldwide. Symptoms include feeling depressed most of the day, diminished interests, significant weight loss, loss of energy [1]. A recent systematic review indicates the lifetime prevalence of Major Depressive Disorder ranges from 2% to 21% worldwide with no significant change in the past few decades [2]. Depression symptoms have a notable influence on both the micro-level of an individual's life and macro-level of the national economy [3]. Absenteeism and presenteeism due to MDD result in a lowered income, even unemployment, and an estimation of \$33.6 billion loss for the US per year.

Despite its high prevalence and affection, the etiology of MDD remains incompletely understood, and treatment of MDD varies. With high recurrence rate of medication alone for treatment for MDD, the combination of medication and psychotherapy is most effective to ensure prolonged wellness [4]. As researchers attempt to gain more understanding of the cause of MDD, numerous

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hypotheses and models have been proposed. Over the course of history, scientists actively pursue research on etiology of MDD. From the first monoamine hypothesis of depression to network theory of psychopathology, scientists are yielding refined theories and models. This review paper will examine Psychodynamic Theory regarding the etiology of Major Depressive Disorder (MDD), along with the corresponding treatment inspired by it.

Psychodynamic Theory has a complex evolutionary history. Given that the Psychodynamic Theory originated from Sigmund Freud, it has undergone a process of development along the history. The current understanding of Psychodynamic Theory is a combination of four major schools of thoughts including Drive Theory, Ego Psychology, Object Relations, and Self Psychology [5]. However, majority of the review paper focusing on Psychodynamic Theory was written prior to the last decades. Most of the treatment corresponding to the theory is outdated. This review paper integrates various psychological approaches to examine the treatment for MDD with emphasize on the application of Psychodynamic Theory.

2. Major Depressive Disorder and Psychodynamic Theory

2.1. Drive Theory

Freud believed that behavior and personality are resulting from the interplay of ego, super ego, and id. He also stated that cognitive stress arises from conflict between the three components. According to Freud, id is the most instinct primitive component, represented by basic needs. Ego is the conscious and rational mind that interacts id with the outside world, represented by fulfilling desire in a socially accepted way. Superego is the moral conscience, represented by punishing when ethnicity is violated. As the individual attempts to satisfy its desire but is unable to succeed due to superego or environment, conflict is triggered. This conflict activates an individual's anxiety or depression under certain conditions.

A review paper concluded a hypothesis by Blatt and Zuroff that high self-criticization and high dependent personality traits as a risk factor for MDD [6]. The mechanism underlying the vulnerability is the desire for achievement. Self-criticize individual set standards for different aspects and imagine standards being set by others. In order to qualify the standards, individuals with high self-criticization exert maximum effort to meet the standards. Failure to meet the standards can trigger negative emotion, thus having the vulnerability to MDD. For highly dependent individuals, they place priority on interpersonal relationships. They exhibit negative emotion from rejection. Consolidating Blatt and Zuroff hypothesis with Freud's instinct primitive component, individuals with self-criticized personality can be understood as having the desire of achieving goals or standards set by self or other people. Individuals with a highly dependent personality can be understood as having the desire to connect with other individuals. Conflict is triggered when individuals fail to meet the standard or fail to form a relationship. Conflict is triggered when an individual's desires are unable to meet, thus, leads to negative emotion and MDD if left untreated.

2.2. Ego Psychology

Drive Theory was further developed by theorists with the expanding role of ego. Ego Psychology believed ego was underestimated, instead of relatively weak in relation to id, ego is a separate dynamic system capable of doing judgment, testing, thought processing, regulating stimuli, and regulating aspects of personality [7]. Ego plays an important role in regulating internal, external stimuli, and managing conflict between desire and conscious mind.

Ego psychologists believe depression is a result of ego reaction. Depression and anxiety exist when ego perceives danger as unable to cope and turns the thought of death inward to eliminate the threat [8]. When ego is unstable, individuals are unable to cope with internal needs and external

experiences, thus, unable to stabilize emotion. With evidence showing the effectiveness of adaptive emotional regulation strategies (e.g., reappraisal), inability in the function of ego may be a fundamental attribution for depression.

2.3. Object Relation

Object Relation was supported by Greenberg and Mitchell, who describe humans as "object seeking". Theorists believed humans were motivated to connect with others. Thus, Object Relation Theory was interested in the pre-oedipal period where children start interacting with their caregivers. Children form "real" interpretations and form mental representations of others. These interpretations influence how children perceive themselves and how they relate to each other. The term "object" refers to both internal representation and the external world that can reflect past interpersonal experience. With its ability to shape personality, interpretations can be a contribution to negative emotion states.

Since internal representations are unable to be fixed by the individual itself, adjustments are made through new relational experience or connection with the external world. When conflict emotions exist during the interaction with people, negative emotions arising from conflict will contribute to MDD. This explains the correlation between the quality of interpersonal relationships and MDD [9].

Another explanation interpreting Object Relation Theory and Attachment Theory. when a child had abusive parents, they tried to make sense of their abusive action causing chronic trauma. When the abusive children grow up, they form a similar pattern of behavior [10]. This includes high levels of cortisol, along with fear and anxiety, avoidant and dissociative personality.

2.4. Self-Psychology

Self-Psychology emphasizes the understanding of self with the focus on an individual's personal and subjective experience. To form a healthy sense of cohesive self, individuals need the engagement of the outside world. External engagement such as community services, government interventions, and social justice can hurt or help individuals. Thus, external engagement must be taken into consideration of selfhood. The movement Black Lives Matter outburst in 2020 provides a good example of how social events can hurt an individual's selfhood.

MDD is the result from failure of self-cohesion, and abnormal sexuality is the cause for depression [11]. Individuals with a strong sense of self are better at coping with stress. Individuals with low sense of self are fragile at self-esteem and struggle to regulate their emotional state, thus are more vulnerable to negative emotions such as emptiness and lack of motivation. In the example provided in the previous paragraph, Black Lives Matter can disrupt an individual's sense of self in numerous ways. The violence expressed in this movement challenged the individual's identity and belief. The operation challenged the individual's social justice.

3. Treatment

Many confuse Major Depressive Disorder with depression or just a sad mood. However, MDD is a specific clinical diagnosis with clusters of symptoms including prolonged depressed mood for more than two weeks, diminished interests, significant weight loss, loss of energy. Current study believes MDD can be caused by the interaction of genetic and environmental cues. A recent literature review suggests that significant environmental stressor can play a large role in MDD [12]. Data suggested that women with prior trauma are 2.5 times more likely to have MDD and 80% MDD patience have negative experience. Treatment for MDD includes medication and psychotherapy. Though antidepressant has been widely preferred, the assumption that medication as the only tool to treat

MDD has been challenged. Psychotherapy, especially CBT, provides another approach for amelioration of symptoms. On the contrary, research suggests medication alone for treatment for MDD has a high recurrence rate, the combination of medication and psychotherapy is most effective to ensure prolonged wellness [4]. Psychotherapy for MDD is designed to address the thought and emotion that might contribute to depression. Psychotherapy has been tested effective for mild to moderate outpatients with MDD [13]. The following paper will be describing popular psychotherapy approaches in treating distorted thoughts in MDD.

Based on the foundation of Psychodynamic Theory, Psychodynamic Therapy is formed and tested effectively with the aim of understanding an individual's behavior and thought. Psychodynamic treatment is a talk-based therapy that requires clients and therapists communicate together to help clients understand their inner conflict attributing to his or her struggle and form a supportive relationship [14]. Psychodynamic treatment is a continuum with an interpretive pole on the one end and supportive pole on the other end. Interpretive pole focuses on helping individuals with a better understanding of current conflict attributed to the situation. Supportive pole focuses on abilities that are temporarily unavailable or under-developed due to stress or trauma. Examples towards interpretive poles are interpretation, confrontation, and clarification. Interpretation, such that bringing unconscious thought into consciousness. Confrontation, therapist actively brings attention to client's response or thoughts. Examples towards supportive poles are affirmation, advice, emphatic validation, and encouragement to elaborate. The purpose of interpretive pole is challenging clients to introspect their unconscious mind and analyze the source of intrapersonal conflict. The purpose of a supportive pole is to practice the abilities that are disabled due to mental struggle.

The refinement of Psychodynamic Theory and other therapeutic approaches results in a more efficient way of treating MDD. The following article will be introducing dynamic approaches effective in patients with MDD, targeting on negative thoughts.

3.1. Interpretive Pole

The primary phase for altering dysfunction belief is, according to Freud's Drive Theory, find the unconscious conflict. With the aim of identifying needs or desires underlie the problem or situation, dream analysis can be effective in understanding the unconscious conflict as well as potential ways to treat [15]. With the belief that dreams can reflect unconscious belief and conflict, individuals and therapists can use the characters, setting, and events to have a better knowledge of emotional struggle. Similar psychological approach includes Roschach's inkblot therapy, where clients interpret several inkblot images and describe what they see, especially helpful when treating patients with language deficiency.

Another psychological approach that can be effective is Mindfulness-based Therapy. In general, Mindfulness-based Therapy emphasizes the action of drawing attention to the present moment without judgment with regulating an individual's focus and attention and approaching the present moment with curiosity and openness. The term "mindfulness" refers to the conscious state under the reality [16]. In contrast to mindfulness, mindlessness is a state of being unaware of the present moment, or absent-minded. For example, it's very late when an individual gets home after work, this individual takes the key out from his or her bag, opens the door, takes off the jacket and hangs the jacket in the closet, puts the key away, and changes shoes while thinking about what to make for dinner. Since this individual has done the same action every day after work, and his or her mind is elsewhere thinking about dinner, he or she is not aware or even has no memory of what he or she just did. When an individual is under "auto pilot" mode, there is risk for previous patterns of negative thoughts to come in without the individual's notice. Mindfulness-based Therapy contains several mindfulness techniques including meditation, yoga, and mindful breathing.

The next phase is altering dysfunctional thoughts. Cognitive Behavior Therapy (CBT) can be effective under these circumstances. The core ideology is that cognitive stress and behavioral problems result from distorted thoughts towards people and environment. Since an individual's thoughts and behavior are interrelated, changing emotional regulation can be done by changing the distorted thought.

Rational Emotive Behavior Therapy was developed by Ellis with the belief that feelings or emotion is attributed to our beliefs and attitudes, instead of the event itself [17]. That being said, events are neutral, but human beings attribute the neutral event with negative or positive emotion based on their belief. Thus, most negative emotions are irrational, or have been assigned by humans. In order to change and realize their irrational thoughts, Ellis promotes challenging client's irrational beliefs and uses introspection to "look inside". Though most patients are not aware of irrational thoughts, the task for therapists is to make them notice.

Cognitive Therapy emphasizes distorted thoughts with the belief that schema, which are formed in early experience, generalizes incoming information. False schema leads to distortion of perception and thoughts. Replacing a client's distorted evaluation with more practical evaluations is the primary object for Cognitive Therapy. Treatment is a step-by-step teaching based clinical intervention. Procedure is acknowledging interrelationship between cognitive and behavior, aware of thoughts coming in, challenging the automatic thoughts, replacing with more realistic thoughts, identifying thoughts or belief underlying causing negative experience.

Self-instructional Training (SIT) was first designed to treat children with impulses, where they also follow step-by-step progress. The goal is using verbal self-command cues by the child himself or herself and following the command appropriately. For patients with MDD, SIT can help the patient challenge the negative thoughts when it comes up and remind them of coping strategies. SIT as a helpful self-help tool, can be used in combination with other clinical approaches to ameliorate the distortion of negative thoughts.

Stress inoculation training focuses on building resilience against uncontrollable stress. The practice of stress inoculation training includes three phases, education phase, acquisition phase, and application phase. Education phase includes working with a therapist targeting the stressor and understanding the natural reaction of stress. Acquisition phase requires the patient to acquire coping strategies and start rehearsing. At the final stage, patients are exposed to multiple stressor and practice coping strategies.

3.2. Supportive Pole

Psychodynamic therapy as a talk-based approach requires a positive relationship between clients and therapists. Clients should trust the therapist, on the other hand, the therapist should work to win the trust from the clients.

Developing meaningful relationships can also help individuals with the sense of belonging and purposefulness. Empathy as a therapeutic tool, though controversial, is the only way to engage with the client's inner world. Explanation for empathy is placing the individual (therapist) into the client's inner world. During the session, therapists are required to exhibit a high level of openness, agreeableness, and without judgment. That being said, only the client has the ability to accept or reject an idea. Once the client feels understood, a good therapeutic relationship is built [18].

As MDD can result from traumatic early experience, therapists can ask for details of a client's early childhood experience and attachment with a caregiver in the therapeutic setting. In an extreme case, one thing that draws attention is that the victim of childhood abuse tends to hide abusing parents' behavior [10]. Children experiencing abuse face barriers to seek help and make decisions, thus are likely to form dissociative defenses to cope with stress, where they detach themselves from reality. Treatment plan for uncovering dissociative defenses can be dangerous. In the process of

breaking down defenses and uncovering the abusive experience, patience is easily overwhelmed by traumatic memories. Sudden loss of defenses can also result in overflow of sadness and worthlessness, causing more traumatic emotion. Treatment plans of self-object transference can focus on therapeutic relationships, with the purpose of leading clients to see the therapist as a good "object" to relate, gradually replacing the image of abuser. In order to form a good therapeutic relationship, active listening, validation, and setting boundaries can be helpful. Among those three, setting boundaries is important on the aspect of protecting therapists since the clients might act out as abusers against the therapist.

3.3. Beyond Psychodynamic Therapy

In the last few years, the outbreak of Covid-19 altered people's lifestyle worldwide. As public places shut down, people work from home, and socialize remotely during Covid-19. Mental disorder during that period is just like the virus itself, spreading across the world. As mentioned before, one of the symptoms of MDD is sleep disturbances. Sleep deprivation is highly correlated with mental health [19]. People stayed inside due to quarantine and social distance which leads to reduction in the chance of exposure under natural sunlight, which could help regulate body's circadian rhythm [20]. Exposure to artificial light such as the blue light from computer screen and general light at night could disturb the sleep-awake system. Both can result in the body's production of serotonin. Furthermore, serotonin plays key role in regulating mood. This explains the explosive growth of depression rate during lockdown. Under this circumstance, therapist can introduce patience natural ways to boost serotonin level. Other than exposure to sunlight, positive thinking using mindfulness-based therapy or meditation can help to introspect and realize negative thought. Mindfulness-based therapy could alter those negative thoughts and prevent rebound of negative symptoms. Healthy diet rich with tryptophan helps the production of serotonin. Source for tryptophan including turkey, cheese, and egg.

As mentioned before, interpersonal relationship plays an essential role in MDD treatment. Some may concern lockdown during Covid-19 can impair the efficiency of psychotherapy. However, therapists expressed their positivity toward online therapy, or tele-therapy [21]. Though majority of therapists experienced mind change toward tele-therapy, most of them find online therapy meet their requirement for what they want to achieve in a session. Therapist also report that clients hold positive attitudes toward online therapy with more interaction in the new setting. Limitation of online therapy varies in different area. While some clients report impersonal feeling during online therapy, privacy is crucial aspect of therapy effectiveness. Solution to that includes selecting a secure platform, teach clients privacy protection, and use strong password for both the platform and file sharing. Online therapy will also limit nonverbal cues such as gesture and position. Therapists should pay more attention to facial expression in a face-to-face online platform, and to more verbal cues in a telephone therapy.

4. Discussion

Despite the theoretical effective technique of treatment, it is very hard to be tested in an experimental setting. Individual differences can be a threat to the validity of experimental settings, making it impossible to control variables. Considering individuals with different backgrounds, social status, economic status, and culture, some ideas may be rooted into the mind, making it unnecessary to replace. Those differences also serve as a barrier for the communication between therapists and clients.

In a clinical setting, therapists also need to consider the comorbid of discord or thoughts. This paper introduced possible theories explaining etiology of MDD with corresponding treatment.

However, patience may exist complex distorted thoughts that cannot be explained by one theory. The mix of treatment can be dangerous for both clients and therapists. For example, most treatments encourage a good relationship between clients and therapists, and the best way is to show kindness and caring. In the case described in Blizard's paper illustrates the countertransference associated with showing interest [10]. The client was sexually abused during childhood, a therapist showing interest may be perceived by this client as sexually interested. This sets barriers for therapeutic relationships.

5. Conclusion

Major Depressive Disorder has become one of the most concerning psychological disorders. As psychologists actively discovering the etiology of MDD, different theories and models have been raised to explain MDD. Psychodynamic Theory is one of the most well-established theories first proposed by Freud. After the complex evolution, Psychodynamic Theory was gradually developed into four major stages, Drive Theory, Ego Psychology, Object Relation, and Self Psychology. Drive their focused on unconscious conflict that leads to negative thoughts. Ego psychology attributes MDD to unstable ego. Object Relation points out human are "object seeking" and always looking for an interpersonal relationship. Self-Psychology emphasizes the cohesive of self. Treatment corresponding to Psychodynamic Theory is psychodynamic therapy. With interpretive pole on one side and supportive on the other side, Psychodynamic Theory works on uncovering the unconscious conflict and build healthy relationship with therapist to enhance the strong self. Therapeutic approaches including Mindfulness-based Therapy, and Cognitive Behavior Therapy.

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