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Review Article

Dissociative Identity Disorder: A Challenge for Researchers

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ABSTRACT

Dissociative identity disorder (DID) is the famous psychiatric condition which is controversial and often been confused and misunderstood over the years. It is previously known as multiple personality disorder. Some people believed it as a spiritual phenomenon, while the scientific community believes it to be a pathophysiological disorder. Various studies are conducted in search of pathophysiology of this mysterious condition, some studies shown results while some had failed. In this review, we had discussed the history of DID along with symptoms, diagnosis and pathophysiological nature of this disorder. We had also discussed possible treatment interventions for DID, with a focus on psychotherapy interventions and current psychopharmacology treatment. We hope, the studies which are currently ongoing will give positive results, and will be helpful to treat and manage the patients with DID successfully in the near future.

Keywords: Multiple personality disorder, Dissociative Identity Disorder, Trauma, Dissociation, Split personality.

INTRODUCTION

Dissociative identity disorder (DID), commonly referred as a multiple personality disorder, is a mental disorder in which a person's consciousness, memory and identity appear fractured. Previously, Dissociative identity disorder (DID) was known to be multiple personality disorder or split personality disorder. The name multiple personality disorder was replaced by American Psychiatric Association, 2013 to Dissociative identity disorder (DID) and also by World Health Organization,1992 as labeled in ICD10.[01] Since 1980s, DID has been recognized in Diagnostic and Statistical Manual of Mental Disorders (DSM).[02] In DID, Alternate personalities emerge and take control of a person's actions and consciousness without his or her knowledge.[03] In short, the presence of more than one personality state within an individual is DID. In these, the patient does not recall the events after coming back to its original identity.[04]

In 2013, DSM 5 came up with new definitions of DID, it is defined as

1. Patient have two or more different identities, with its own enduring pattern of perceiving

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and thinking about self and environment. As per DSM 5 distinct identities may be seen as "experience of possession". This state involves signs and symptoms such as change in behavior, consciousness, memory, perception, cognition, which may be observed by others or can be reported by individual itself.

The second dissociative identity disorder criterion in the DSM-5 is:

2. Due to disorder the patient must be distressed or have trouble in life because of disorder. This criterion seems to be common in all mental illness as diagnosis is not appropriate where the symptoms do not create distress and/or trouble functioning.
3. Amnesia must occur, which can be defined as gaps in the recall of personal information, everyday events. This criterion of DID tells that amnesia occur in daily events too, not only in traumatic events.
4. The disturbance is not part of normal cultural or religious practices. This DID criterion is to eliminate diagnosis in cultures or situations where multiplicity is appropriate. An example of this is in children where an imaginary friend is not necessarily indicative of a mental illness.[05]

For, DID core diagnostic criterion includes recurrent gaps in the recall of personal information and experienced events, and it can be present as one- way amnesia (with only one identity reporting access to the memories of the other) or two- way amnesia(with no transfer of information reported across identities).[06] In DID, the nature of inter-identity amnesia is not completely understood, from preliminary research in inter-identity impairment suggested that only memories retrieved explicitly exhibited. However, both explicitly and implicitly retrieved memories in DID exhibit transfer was found when studies done with more objective measures. Explicit memory refers to person's conscious, intentional recollection of previous events while implicit memory refers that earlier experience can effect perception and behavior without the conscious awareness of that experience. [07, 08]

It is difficult to diagnose complex DID or Other Specified Dissociative Disorder (OSDD), it is challenging due to several reasons. First reason is that patient rarely report dissociative symptoms spontaneously without direct questioning also patients present a lot of avoidance. Second reason is that DID or OSDD are polysymptomatic, and specialists would rather diagnose these patients with disorders more familiar to them from clinical practice, e.g., eating disorders, schizophrenia, anxiety disorders, or borderline personality disorder. Because of these reasons, comlex dissociative disorder is mis-diagnosed or underdiagnosed. For example, DID patients (26.5–40.8%) which are already have been diagnosed and treated for schizophrenia.[09]

DID treatment consists of psychodynamic psychotherapy, and it is delivered in three phases. First phase includes safety and symptom stabilization, second phase includes trauma-focused treatment, and the third phase includes identity integration. First phase several years to complete. The second phase i.e. trauma- focused treatment is not for patients with severe form of dissociation, this step cannot be done without first phase of stabilization. Also, it is unknown that how effective interventions for identity integration and due to this many patients does not reach this stage. [10]

As DID patients spends many years with their different identities, they sometimes feels as "imaginary friends", therefore some additional sessions are required to officially say farewell to their identities. The main purpose of this article is to provide complete overview on Dissociative Identity Disorder (DID) with respect to its etiology, diagnosis and treatment.

Symptoms: The main symptoms of DID is involuntary split between multiple personalities, Dissociative Amnesia, Dissociative fugue, blurred identity. Since it is a Brain disorder, the symptoms such as Headaches, mood swings, time lapses, hearing voices, anxiety, and visual, tactile, olfactory, and gustatory hallucinations occurs, but these hallucinatory symptoms are different from the typical hallucinations of psychotic disorders such as schizophrenia. However, Patients with DID experience these symptoms as coming from an alternate identity like feeling that two or more people are living in the head. Other symptoms includes depression, severe pain in the body parts, Depersonalization, anxiety, eating and sleeping disturbances, substance abuse, self-injury, self-mutilation, nonepileptic seizures, and suicidal behaviour and sexual dysfunction.[11,12]

Complications: People with DID are at increased risk of severe complications and associated conditions such as,

- Self-harm
- Sexual dysfunction
- Eating disorders
- Depression or anxiety disorders
- Suicidal thoughts and behavior
- Insomnia, nightmares or other sleeping disorders.

ETIOLOGY

The etiology of DID is based on history of trauma, about 90% cases of DID had some kind of involvement of abuse in childhood or an early loss of any important person or any other reason. Since etiology is the main source of controversy, there are two etiological approaches on DID since the 1990s: the posttraumatic model (PTM) and the sociocognitive model (SCM).

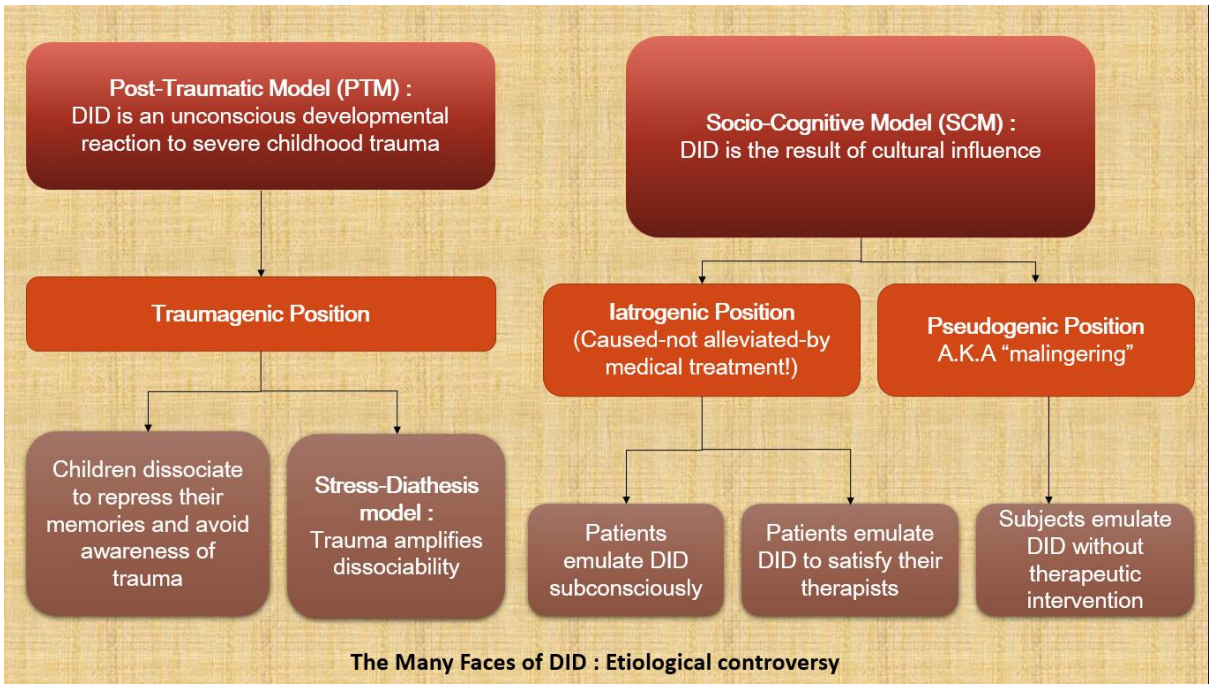

Fig.1. Etiology of Dissociative Identity Disorder

The posttraumatic model (PTM) posits that DID develops as a strategy for dealing with trauma.[13] According to this model, most cases of DID result from severe childhood abuse, the children's who are most often subjected to long term physical, sexual or emotional abuse in childhood and dissociate as a way to avoid the trauma of physical or sexual trauma. Dissociation is often thought of as a coping mechanism that a person uses to disconnect from a stressful situation or trauma. Dissociation may continue, even after the trauma condition is over and the personalities created to handle psychological trauma controls the behavior of the person without the primary identity's knowledge. [14, 15, 16]

The sociocognitive model (SCM), is defined by Spanos in 1994, is based on number of assumptions about DID regarding its core psychopathology, clinical presentation, assessment, treatment, and prevalence. First assumption tells that multiple identity enactment is the core psychopathology of DID. Second assumption tells that patients who are already diagnosed as having DID are generally histrionic (attention seeking). Fourth and fifth assumption is related to the assessment and treatment of DID. According to sociocognitive model (SCM), the method of assessment and treatment in DID, worsens the condition. The model relies on this assumption in two ways are (a) that the most common assessment and treatment procedures use the methods that can create DID and (b) DID can be created iatrogenically. Sixth assumption states that the data suggest that iatrogenic processes have been at work in either altering phenomenology of DID or creating DID. [17, 18]

DIAGNOSIS

As we know, DID is a polysymptomatic, chronic dissociative disorder that occurs in the context of overwhelming experiences in childhood so the diagnostic issues associated with DID are more complex and difficult to understand. It is experienced by clinicians that many DID patients will not open up until they feel relatively secure with the interviewer. The diagnosis is done via mental status examination, basic psychiatric interview, by screening people for dissociation or by differential diagnosis.[19]

The Clinical Interview and the Mental Status Exam: The clinical interview is used primarily to gather information about past and present behavior, attitudes, emotions, and a history of the person's problems. While mental status exam involves the

systematic observation of a client's behavior across five domains:

a. Appearance and behavior
b. Thought processes (e.g., rate and flow of speech, clarity, and content of speech and ideas)
c. Mood and affect (e.g., is affect and mood appropriate of inappropriate?)
d. Intellectual functioning (e.g., does the client have a reasonable vocabulary and memory?
e. Sensorium (i.e., general awareness of surroundings such as date, place, time, knowledge of self).

Screening and Diagnostic Instruments: For the screening of people for dissociation various instruments have been developed. The most widely used instrument is Dissociative Experiences Scale (DES) developed by Bernstein and Putnam. [20] DES is vulnerable to both simulation and dissimulation and relies on the patient's honesty. Meta-analysis studies using the DES showed that it is capable for distinguishing between dissociative disorders and other conditions:

1. The largest mean dissociation scores was found to be >35 in dissociative disorders.
2. The mean dissociation score >25 was found for posttraumatic stress disorder, borderline personality disorder, and conversion disorder.
3. The mean dissociation scores >15 is for somatic symptom disorder, OCD, substance-related and addictive disorders, feeding and eating disorders, schizophrenia, anxiety disorder. [21]

The Dissociative Disorders Interview Schedule (DDIS) of Ross and the Structured Clinical Interview for the Diagnosis of DSM-IV Dissociative Disorders-Revised (SCID-D-R) of Steinberg, are the two structured interviews that has been developed for the diagnosis of DID. [22] The DDIS, it is although much easier to administer, does make intrusive inquiries about abuse, which may be problematic in some settings, and has been suspected of generating a small percentage of false positives in nonclinical populations. [23] The SCID-D-R, is more time-consuming and difficult to administer, does not ask about abuse and, has also not been associated with false positives in normal populations. The score for SCID-D-R ranges from 5 to 20. Normal subjects generally score 7 or less, mixed psychiatric patients have average scores of 8–12 and the patients with dissociative disorder scores 15 or above.

Differential Diagnosis: Due to overlapping symptoms, the differential diagnosis for DID includes some other dissociative disorders such as partial complex seizures, malingering, schizophrenia, bipolardisorder, epilepsy, borderline personality disorder, psychoses and autism spectrum disorder. [24]

TREATMENT

The goal of treatment in DID is to relieve symptoms, to ensure the safety of individual and also those who are around the individual. The best approach depends on nature of any identifiable triggers, depends on individual and severity of individual. Most likely treatment includes:

- **Psychotherapy:** It is the most important treatment in DID. Sometimes it is called as "talk therapy". This is a broad term that includes several forms of therapy.
- **Cognitive-behavioral therapy:** This form of psychotherapy focuses on changing dysfunctional thinking patterns, feelings, and behaviors. [25]
- **Eye Movement Desensitization and Reprocessing (EMDR):** This technique was designed to alleviate the distress associated with traumatic memories in treatment of individual with DID. [26]
- **Hypnosis: It is** also considered to be a useful tool for DID treatment. It uses intense relaxation, concentration, and focused attention to achieve an altered state of consciousness, allowing people to explore thoughts, feelings, and memories they may have hidden from their conscious minds. It controls "psychotic" symptoms and reduces amnestic barriers. [27]
- **Medication:** There are no medication to treat DID, but people who are associated with depression and/or anxiety, may benefit from treatment with antidepressant or anti-anxiety medications.

Atypical antipsychotic (second generation) drugs blocks both serotonin ($5\text{-}HT_{2A}$) and dopamine (D_2) receptors. It may be used in treating complex trauma. It reduce overwhelming anxiety, stabilize mood and reduce intrusive symptoms. Atypical antipsychotic (second generation) drugs is more effective and better tolerated than typical (or first generation) antipsychotics. [28,29]

Antidepressant or anxiolytics are used to treat comorbid symptoms, it stabilize mood and reduce intrusive symptoms. However these medication does not treat the dissociation. Presently, there are no pharmacological medication that can reduce dissociation. Also antidepressant and anxiolytic medications are useful in the reduction of depression and anxiety. [30]

Also there are some more pharmacological interventions in DID which includes:

1. Naltrexone which is an opioid antagonists-shows promising treatment in dissociative symptoms. It is used to reduce self-injurious behavior. Stress- induced analgesia, which is a form of dissociation is mediated by the mu opioid system. [29]
2. Prazosin is used to reduce nightmares.
3. Carbamazepine it is used to reduce aggression, intrusive symptoms, hyperarousal.
4. Benzodiazepines-this class of medication may exacerbate dissociation and used with caution to decrease anxiety. [30]

CONCLUSION

According to researchers, DID is a very problematic and complex disorder and treatment may take years to fully recover the patient. Most researchers simply describe DID rather than attempting to explain its causes and therefore several etiological criticisms of the disorder remain unaddressed. In this Review, we had cover the pathophysiology of DID which is not yet cleared, while it is clear that both biological and psychological factors influence the DID. The diagnosis is often a complex procedure, while treatment of DID includes psychotherapy, positive support from family members, relatives, friends, and some antidepressants are useful in the treatment of DID. We hope the future research and studies will provide positive results in Managing DID.

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