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DISSOCIATIVE IDENTITY DISORDER: A NARRATIVE REVIEW

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ABSTRACT

Dissociative Identity Disorder (DID) is defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) by various criteria, which include disruption of identity, amnesia, and loss of sense of self and agency. It causes significant distress and impairment, which is not attributable to substance abuse or another medical condition. The reported prevalence of DID varies, largely due to cultural differences and various issues with receiving an accurate diagnosis, such as clinician bias and lack of definitive diagnostic tools and guidelines. The disorder has been strongly linked to a history of trauma and distinct neurobiological changes have been observed in patients with DID. The goal of treatment varies based on patient severity. Treatment generally consists of phasic cognitive behavioral therapy, supported by alternatives such as pharmacological interventions, hypnosis and electroconvulsive shock therapy. Most patients demonstrate improvements due to therapy, with associated decreased economic burden. DID remains a controversial diagnosis, with many doubts surrounding it's validity. The purpose of this review is to increase awareness regarding this disorder. Even though it is an established disorder, there is a distinct lack of official guidelines for its treatment and clinicians are often unaware of it. The aim of this review is to compile all existing relevant information regarding the disorder, which may in turn prompt further research regarding the same.

KEYWORDS: dissociative identity disorder, etiology, treatment, validity, cultural differences.

INTRODUCTION

The Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5) defines Dissociative Identity Disorder (DID) as – A. Disruption of identity characterized by two or more distinct personality states, which may be described in some cultures as an experience of possession. The disruption in identity involves marked discontinuity in sense of self and sense of agency, accompanied by related alterations in affect, behavior, consciousness, memory, perception, cognition, and/or sensory-motor functioning. These signs and symptoms may be observed by others or reported by the individual.

B. Recurrent gaps in the recall of everyday events, important personal information, and/or traumatic events that are inconsistent with ordinary forgetting.

C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The disturbance is not a normal part of a broadly accepted cultural or religious practice. Note: In children, the symptoms are not better explained by imaginary playmates or other fantasy play.

E. The symptoms are not attributable to the physiological effects of a substance (e.g., blackouts or chaotic behavior during alcohol intoxication) or another medical condition.[1]

EPIDEMIOLOGY

DID is reported in various countries where researchers have conducted systematic assessments using validated interviews.[2] Community based epidemiological studies are affected by local mental health services utilization patterns and as such better describe the extent and distribution of the disorder in the population.[3] DID had a prevalence of 1.5% among adults in a small U.S. community study of 12 months.[1] A prevalence rate of 1% to 3% has been demonstrated in studies that involve the general population.[4]

Psychiatric inpatients had an incidence of 13.0-20.7% for dissociative disorders in two North American studies[5] while a study in Turkey reported a prevalence rate of 10% in psychiatric inpatients and outpatients.[5],[6],[7] Psychiatric inpatients in Netherlands, Germany and Switzerland demonstrated a prevalence rate of 4.3-8.0%[5],[8] and another study in Switzerland reported a prevalence rate of 25% for dissociative disorders in severely impaired psychiatric outpatients.[5],[9]

A Canadian screening study has reported a prevalence of 10% for DSM-III-R dissociative disorders[5],[10] and a North American community study reported a prevalence of 8.6%.[5] The prevalence across genders has been found to be 1.6% for males and 1.4% for females.[1] A lifetime prevalence of 17.2% in patients admitted for dependency, 9.0% for alcohol dependency only and 26.0% for chemical dependency has been reported in a study from Turkey.[5],[11] Exotic dancers, women in prostitution and adolescents are considered to be higher risk groups for the disorder.[5]

Prevalence increases with psychiatric severity, ranging from 2% in outpatient clinics to 5% in inpatient units and even higher in emergency settings.[3] The differences in the reported prevalence could be explained due to diagnostic instrument chosen and cultural differences in symptom interpretation.[5] For instance, possession states, which are a variation of DID, have been largely reported in China, Iran, India, Turkey, Singapore, Puerto Rico and Uganda.[2] In a study from India, dissociative disorders were diagnosed rarely while possession states were seen commonly.[12]

DIAGNOSIS

Assessment tools for screening of dissociative disorders range from easy-to-administer, short and structured instruments to comprehensive inventories.[13] Structured interviews like Dissociative Disorders Interview Schedule (DDIS) and semi-structured ones like Structured Clinical Interview for DSM-IV Dissociative Disorders (SCID-D) are essential in diagnosing dissociative disorders in research studies.[13]

The DDIS is used in the diagnosis of somatization disorder, borderline personality disorder, major depressive disorder, and all the dissociative disorders.[14] It is a 132-item interview that takes 30 to 60 minutes to administer, which also helps in assessment of childhood abuse and secondary features of DID.[4] It has promising validity and reliability as it has been tested on psychiatric groups that are expected to show overlap with dissociative disorders.[15] However, it does not assess the frequency or severity of symptoms.[4]

The SCID-D- Revised is a 277-item interview that takes 45 to 180 minutes to register and assesses five symptoms of dissociation.[4] Two studies have shown that it has good to excellent reliability as a diagnostic tool and good validity in differentiating those with dissociative disorders from those without the same.[16],[17] However, it does require the interviewer to have familiarity with dissociative symptoms.[4]

The Multidimensional Inventory of Dissociation (MID) has been developed for a more comprehensive evaluation of dissociative phenomena[18] and was designed for assessment of patients with a mixture of dissociative, posttraumatic and borderline symptoms.[13] It is a 218-item instrument that takes 30 to 90 minutes.[4] The MID correctly diagnosed 87% to 93% of DID cases and can be used for studying large clinical sample populations.[15] The Dissociative Experiences Survey (DES) is a self-report questionnaire of 28 questions[4] which is considered effective in the screening of DID.[18] However, cultural differences do appear in the most effective cut off scores, which could be explained by differences in reporting and experiences of DID and also due to differences in the various translated versions of the DES.[3] The DES taxon uses 8 questions from the DES that are identified in a class (taxon) of those that demonstrate pathological dissociation.[4]

The Dissociation Questionnaire (DIS-Q) is a 63-item self-report questionnaire[4] with good to excellent reliability, but lacking any separate dimensions for depersonalization and derealization.[19] The Somatoform Dissociation Questionnaire (SDQ-20) is a 20-item self-report questionnaire that uses a 5-point Likert scale while SDQ-5 is a shorter version of the same.[4] A study concluded that both SDQ-20 and SDQ-5 are psychometrically sound.[20] A study has also found the Structural Analysis of Social Behavior (SASB) promising in differentiating DID from other disorders and for examining identity issues in clinical populations.[18],[21]

DID can be differentiated from other disorders using structured interviews and self-report measures, however, multiple covert dissociative and non-dissociative symptoms may delay accurate diagnosis.[3] Most individuals who meet the criteria for DID have been in the mental health system for 6-12 years before being correctly diagnosed.[2]

Both male and female patients had received numerous prior diagnoses and had spent a long period of time in the mental health system before the correct diagnosis was made according to one study.[22] Another study in psychiatric outpatients found that only 5% of patients in whom a dissociative disorder was identified during the study had previously received a dissociative disorder diagnosis.[23]

DID is easily misdiagnosed because its signs and symptoms can be readily attributed to other more familiar psychiatric disorders.[14] Lack of training along with skepticism about dissociative disorders seems to contribute to the under recognition and delayed diagnosis of DID.[2] Only 5% of Puerto Rican psychologists surveyed reported being knowledgeable about DID while a majority had received little or no training about it.[2] In a study among U.S. clinicians, only 60.4% correctly diagnosed DID.[2] A Northern Irish clinical vignettes study demonstrated that majority of clinicians failed to diagnose DID as the most likely condition in a clear-cut case.[24] In another study, over half of Australian clinicians thought that dissociative disorders were valid, however the rest were dubious about their validity with over 10% believing them to be invalid. Only 21% had

considerable experience with the disorders. These findings may relate to delays in diagnosis perceived by patients.[25]

The difficulties in diagnosing DID result primarily from lack of education among clinicians regarding dissociation, dissociative disorders, and the effects of psychological trauma, as well as clinician bias.[4] Thus, we can conclude that while DID is a valid diagnosis, it is often misdiagnosed and also under diagnosed. This is due to multiple factors, including cultural differences, and issues with clinician knowledge and training, as well as clinician bias regarding the validity of dissociative disorders.

ETIOLOGY AND DEVELOPMENT

There has been extensive debate on whether dissociative disorders are fundamentally related to psychological trauma or whether they are conditions that are created artefactually.[26]

- The trauma model.

It proposes that dissociation is a psychobiological state or trait which occurs as a protective response due to traumatic overwhelming experiences.[26] Those who support this model suggest that the trauma dissociation relationship is seen in a variety of clinical and non-clinical settings and varies depending on the trauma specific features.[27] Dissociation occurring in the context of dissociative disorders has been linked to trauma exposure, such as in samples of refugees, people seeking support after violent homicides of loved ones and battered women.[28] It is proposed in this model that the individual experiencing dissociation attempts to avoid recalling the trauma, disconnects from the emotional content of the memory and thus ultimately fails to recall some or all of the memory.[27]

It has been demonstrated that those with high dissociation have an impaired memory for words associated with trauma and also report significantly higher trauma history and betrayal trauma.[29] It has been suggested that emotional neglect may predict a dissociative disorder.[30] It has been hypothesized by many experts that the inability of traumatized children to develop and maintain a unified sense of self across various behavioral states results in the development of alternate identities, particularly if the traumatic exposure first occurs before the age of 5.[4]

It can be concluded that DID results from a failure of normal developmental integration which has been caused by overwhelming experiences and disturbed child-caregiver interactions during critical early developmental periods. This in turn leads some traumatized children to develop discrete personified behavioral states that ultimately evolve into the DID alternate identities.[4]

- The fantasy model

The fantasy model proposes that fantasy proneness, suggestion and cognitive distortion lead individuals with dissociative experiences and/or dissociative disorders to report confabulated or exaggerated trauma histories. Proponents of the fantasy model suggest that the relationship between trauma and dissociation is weak and inconsistent and/or may be restricted to cases of profound dissociative psychopathology.[4] A study reported that fantasy prone individuals were found to have higher levels of dissociative symptoms than individuals who are not prone to fantasy.[31]

Several investigators have speculated that high levels of dissociation would predict the tendency to incorporate misleading information into memory. Individuals who are prone to dissociation also report more cognitive failures, as measured by the Cognitive Failures Questionnaire.[31]

However, there is no actual research that shows that the complex phenomenology of DID can be created, let alone sustained over time, by suggestion, contagion or hypnosis.[4]

A number of lines of evidence support the trauma model over the fantasy model (also called the sociocognitive model). These include studies that demonstrate that DID symptoms in children, adolescents and adults with significant maltreatment manifested prior to clinician interactions. Psychophysiological and psychobiological studies, which will be discussed below, also support the trauma model.[4] DID patients have been shown to report symptoms that were previously unknown to the patients, the general culture and even most clinicians.[4]

Two lines of research challenge the fantasy model or iatrogenesis theory – first, prevalence studies in cultures where DID is not well known have reported cases of DID, and second, evidence of chronic childhood abuse and dissociation in childhood has been found among adults with DID.[2] Finally, the DSM-V states that DID is associated with overwhelming experiences, traumatic events and/or abuse during childhood, thus giving validity to the trauma model.[1] The trauma model is thus widely accepted in the etiology and development of DID.

NEUROBIOLOGICAL CHANGES

Childhood trauma leads to altered reactivity to stress, which is related to altered gene expression. This suggests that early life stressors may have long lasting detrimental effects on neurobiology and could lead to the development of trauma related psychopathology, such as DID.[32] Childhood abuse and neglect compromise neural structure and function, increasing susceptibility to cognitive defects and psychiatric disorders later in life.[33]

A study reported that global and subfield hippocampal volume is significantly smaller in patients with DID and PTSD, which is also significantly correlated with higher severity of childhood traumatization and dissociative symptoms.[34] Patients with DID and DID along with PTSD also show smaller cortical gray matter volumes of

the whole brain, and of the frontal, temporal and insular cortices. Smaller hippocampal and larger pallidum volumes in comparison to healthy controls and larger putamen and pallidum volumes in comparison with PTSD patients have been observed in patients with DID as well as PTSD.[35]

Bilateral hippocampal volume has been found to be significantly correlated to the severity of lifetime traumatizing events. The volume of putamen and pallidum has been correlated significantly with the severity of dissociative and depersonalization/ derealization measures.[35] Amygdalar volume has also been found to be smaller in patients with DID.[36]

In a functional magnetic resonance imaging (fMRI) study, changes in hippocampal and medial temporal activity along with nigrostriatal system inhibition were observed during volitionally induced personality switch.[37] Differences in psychophysiological and neural activation patterns have been found between DID patients and both high and low fantasy prone controls.[38] The results of a study suggest that early childhood traumatization alters brain anatomy targeting the prefrontal cortex and the maturation of the limbic system, which may be mediated by gene expression in the adult prefrontal cortex.[32]

Different imaging techniques support three as yet unintegrated hypotheses for DID.

- Single photon emission computerized tomography (SPECT) supports and orbitofrontal hypothesis
- Magnetic Resonance Imaging (MRI), functional magnetic resonance imagining (fMRI) and positron emission tomography (PET) studies support a cortico-limbic hypothesis
- EEG and QEEG studies support a temporal hypothesis.[3]

Imaging and neurophysiological studies have shown discrete brain areas of interest in understanding DID. Studies that failed to support any of these hypotheses were not found and it is not clear whether the three hypotheses are competing.[4] Future empirical studies using combinations of imaging methodologies specifically in DID might shed light on the relationship between and a possible merging of the orbitofrontal, cortico-limbic and temporal hypothesis.[3]

Thus, it can be concluded that several neurobiological changes can be seen in patients with DID which further support the claim that trauma is closely related to DID. Further research is required in order to come up with a more complete picture regarding the neurobiology of DID.

CLINICAL PRESENTATION

The presence of two or more alternate personality states or an experience of possession is regarded as a defining feature of DID. When personality states are not directly observed, the disorder can be identified by two clusters of symptoms:

1. Sudden alterations or discontinuities in sense of self and sense of agency
2. Recurrent dissociative amnesias.[1]

Individuals with DID may report loss of sense of self as well as perceptions of voices and loss of sense of agency. Many of these sudden discontinuities may also be witnessed by friends, family or the clinician.[1] Individuals with DID typically present with comorbid depression, anxiety, substance abuse, self-injury, non-epileptic seizures, or another common symptom. They often conceal or are not aware of disruptions in consciousness, amnesia, or other dissociative symptoms. Self-mutilation and suicidal behavior are common.[1]

Headaches, unexplained pain, physical complaints of a sexual nature and fear of physical exams have also been reported. There is often a history of chaotic family situations, childhood abuse, neglect and distorted upbringing. Spontaneous regression, catatonia, odd behaviors, voice or accent changes, sudden involuntary movements, changes in facial musculature, changes in handedness, handwriting changes and dramatic shifts in mood have also been noted in some patients. The patients often have abnormal self-concept, body concept and marked phobias. Delusions, hallucinations, illusions, flashbacks, revivifications, derealization, depersonalization and marked detachment are also commonly seen.[39]

It has already been discussed that patients with DID present with a variety of symptoms and are thus frequently misdiagnosed. They also often have other comorbid psychiatric issues, thus presenting with multiple symptoms which may be attributable to different disorders.

ALTERNATE IDENTITIES

Alternate identities in DID patients have been described in a number of ways. They have been described as highly discrete states of consciousness that are organized around a prevailing affect, sense of self (including body image), with a limited repertoire of behaviors and a set of independent memories.[4]

Development of discrete, personified behavioral states in the child is thought to encapsulate intolerable traumatic memories and decrease their effects on overall development.[4] It has been indicated by developmental models that DID does not arise from a previously mature, unified mind or a core personality that becomes shattered or fractured but in fact results from a failure of normal developmental integration that is caused by overwhelming traumatic experiences.[4]

The primary identity is the individual's original identity that carries their given name and is passive, dependent and usually guilty and depressed. The alternate

personality states, when in control, have a distinct history and identity, with their own pattern of self-perception. These states are referred to as 'alters' and have different characteristics compared with the primary identity. These characteristics could include the name, age, gender, functions, mood, memories, and vocabulary, along with other traits. It has been reported that the emergence of a particular episode may occur due to a stressor or even a drug.[40]

Cultural aspects further complicate alternate identities, with possession form identities more common in some cultures than others and this will be discussed further in this review.

GOALS OF TREATMENT[4]

Although the patient may not agree due to their subjective experiences, it is necessary to remember that the patient is not a collection of separate people sharing the same body. The patient should be seen as a whole adult person, with the alternate identities sharing responsibility for life as it is now. Experts are in agreement that wherever possible, treatment should move the patient toward better integrated functioning. It is counter-productive to treat any alternate identity as if it were more real or more important than the other. It is also counter-productive to tell patients to ignore or get rid of alternate identities.

There is consensus from experts in the dissociative disorder field that the most stable treatment outcome is fusion – complete integration, merger, and loss of separateness of all identity states. A considerable number of DID patients however will never be able to achieve full fusion and/or do not see a full fusion as desirable, even after undergoing considerable treatment. Hence a more realistic long-term outcome would be a cooperative management, sometimes called as resolution, which is optimally integrated and coordinated functioning among all alternate identities, that allows optimal vocational, interpersonal, intrapsychic and emotional functioning.

TREATMENT

Formal guidelines such as National Institute for Health and Care Excellence (NICE) guidelines are not available for the treatment of DID. The most commonly provided treatment approach is individual psychodynamic psychotherapy.[41]

Expert consensus is that complex trauma related disorders are most appropriately treated with a phase or stage-oriented approach. The most common structure is as follows.

1) Safety, stabilization and symptom reduction
2) Working directly and in depth with traumatic memories
3) Identity integration and rehabilitation

In the first phase, establishing a therapeutic alliance and patient education should be emphasised. Initial work with DID patients must assess any major self-destructive behaviours and other issues that may potentially jeopardize patients' physical or psychological safety, such as suicidal behaviors, alcohol or substance abuse, eating disorders and other high risk behaviors.[4]

Later the focus turns to working with the patients' traumatic experiences. In general, this involves remembering, tolerating and integrating overwhelming experiences from the past. Ideally, traumatic memory work should be carefully planned and scheduled. This gives the patient a sense of control over the emergence of traumatic memories. Destabilisation could occur during this phase, prompting a return to focusing on stabilisation, internal communication, containment and symptom management.[4]

In the third phase, patients continue to make gains in internal coordination and integration and usually begin to achieve a more solid and stable sense of who they are and how they relate to the outside world.[4]

The issue of integration should be considered in a psychotherapy relationship. Integration is considered as a necessary aspect of trauma recovery by some while others state that it is a personal choice for each individual patient.[42] A lack of concentration on stabilisation, and/or a premature focus on detailed exposure to and processing of traumatic memories could result in overwhelming emotions, exacerbation of symptoms, and decompensation of the patient, accompanied by deterioration in day-to-day functioning.[41]

The frequency and duration of sessions may vary depending on a number of factors, such as the goals of the treatment and the patient's functional status and stability.[4]

Schema therapy is another evidence-based treatment for patients with personality disorders, which is an integrative therapy that lasts 1-3 years. It blends traditional cognitive behavioural therapy with experiential and interpersonal elements. The aim is to normalise the different identities by considering them as modes which are common in all humans, though different in degree on intensity. Amnesic barriers are not considered here.[41]

A behavioural approach can be used with DID patients to target and reduce self-harm and suicidal behaviour. A case was reported where Dialectical Behavioural Therapy (DBT)-informed treatment was used to overcome the patient's suicidal and self-harm behaviours.[43]

Psychotherapy facilitated by hypnosis was considered as the best treatment strategy by clinicians according to a study.[44] Hypnosis is commonly used for calming, soothing, containment and ego strengthening. Several powerful rationales support the use of hypnotic strategies as an adjunct to DID treatment. DID patients have been

reported to be more hypnotizable than other clinical populations.[45] Clinical reports along with some controlled studies suggest that hypnosis is a safe and effective adjunctive procedure in the treatment of PTSD and other posttraumatic conditions[46] and thus might be useful in DID.

Eye Movement Desensitisation and Reprocessing is a psychotherapeutic method which accelerates information processing and facilitates the integration of fragmented traumatic memories.[47] It utilises standardized procedures including bilateral dual attention stimuli to activate the information processing system to bring the client to a robust level of mental health.[48] However, this modality of treatment may have considerable risks for the DID patient.[4]

Psychotropic medication is not a primary treatment for DID. However, most therapists report that their DID patients do use medication as an element of their treatment.[4]

Antidepressants are commonly used in DID patients to manage symptoms of depression and/or PTSD.[4] Paroxetine, fluoxetine and venlafaxine have been reported to be useful in the management of PTSD.[49] Low dose risperidone, mirtazapine and sertraline have been successfully used to help a patient come to terms with her previously undiagnosed with DID.[50] Clomipramine may be particularly useful in patients with obsessive-compulsive symptoms.[4] Selective serotonin reuptake inhibitors (SSRIs) have largely replaced older antidepressant agents such as monoamine oxidase inhibitors and tricyclic antidepressants.[4]

Anxiolytics may also be used on a short-term basis. A case was reported where a lorazepam-assisted interview was conducted in a patient with DID. With the lorazepam-assisted interview, there was recall of repressed memories that were associated with undesirable conflicts and adverse life events.[51] It is important to remember that many commonly used benzodiazepines have addictive potential and many DID patients have history of substance abuse.[4]

Trazodone, diphenhydramine, mirtazapine, low dose tricyclic antidepressants and low dose neuroleptics have been used for anxiety and insomnia.[4] Clonidine, trazodone, atypical antipsychotics, topiramate, low dose cortisol, fluvoxamine, triazolam, nitrazepam, phenelzine, gabapentin, cyproheptadine and tricyclic antidepressants may be used in PTSD associated nightmares but the evidence is low grade and sparse.[52]

Antipsychotics have been used to successfully treat overexcitation, thought disorganization, intrusive PTSD symptoms, chronic anxiety, insomnia and irritability in DID patients.[4] A case has been reported where quetiapine 25 mg daily showed significant improvement in symptoms, after psychotherapy and supportive pharmacotherapy with fluoxetine and risperidone did not show symptom improvement after 1 month.[53] Another study also showed significant dissociative symptom remission after quetiapine use for 4 weeks, without any other psychological or pharmacologic therapies.[54]

Clomipramine, fluoxetine, lamotrigine and opioid antagonists may be used in depersonalisation disorder. However, they do not appear to have a potent anti-dissociative effect.[55] Some severely and persistently ill DID patients respond well to clozapine for severe PTSD symptoms.[4]

Naltrexone could have some efficacy in treating aspects of self-destructive behaviours in DID patients. PTSD hyperarousal and panic may respond to beta blockers such as propranolol. Clonidine and prazosin may also be effective in PTSD hyperarousal treatment. Methylphenidate, mixed amphetamine salts and dextroamphetamine may be useful in the treatment of comorbid attention-deficit/hyperactivity disorder in DID patients.[4]

Hospitalised DID patients may benefit from benzodiazepines (primarily diazepam) or neuroleptics (haloperidol, fluphenazine).[4] Very limited research exists on pharmacotherapeutic interventions for DID. Most pharmacologic therapy is empirical. Further research is required in this area.

Electroconvulsive therapy has not been shown to be appropriate or effective in DID patients.[4] A case was reported wherein the patient was unable to function adaptively while treated with psychotherapy and medication but with addition of electroconvulsive therapy (ECT) she began to show significant improvement in affect as well as decreased suicidal ideation. It is believed that the efficacy of ECT was its ability to reduce/remove the patient's psychosis, depression, psychomotor retardation and suicidal ideation.[56] However, a subgroup of DID patients report significant permanent loss of autobiographical memory and ongoing memory impairment after ECT.[4]

TREATMENT OUTCOMES

A study that prospectively assessed treatment response from DID patients and their therapists reported statistically significant reductions in dissociation, PTSD, distress, depression, hospitalisations, suicide attempts, self-harm, dangerous behaviours, drug use and physical use, as well as higher Global Assessment of Functioning scores.[57]

It has been suggested that early diagnosis and treatment of DID is critical because treatment in young adulthood may result in faster improvement than treatment in middle or older adulthood.[58] A chart review study in the Netherlands of DID patients in outpatient treatment found that clinical improvement was related to the intensity of treatment and more comprehensive therapies

had better outcomes.[4] Another study concluded that treatment for DID following the given guidelines brings about symptomatic improvement in both dissociative and non-dissociative symptoms. However, ignoring the symptoms of dissociation, as has been advocated by some, results in no improvement.[59]

There is a report that current evidence supports the conclusion that phasic treatment consistent with expert consensus guidelines is associated with improvements in a wide range of DID patient symptoms and functioning, decreased rates of hospitalisation, and reduced treatment costs. Poor outcome is associated with treatment that does not specifically address identity fragmentation and dissociative amnesia.[60]

A 1993 study of Canadian patients calculated a savings or $84,899.44 per patient over 10 years due to the diagnosis and psychotherapeutic treatment of DID. The diagnosis and treatment of DID with specific psychotherapy was concluded to be cost-effective in the study.[61] Another study also reported decreases in cost of treatment. Prior to diagnosis, the patients averaged a cost of $75,000 per patient per year. After diagnosis they averaged $36,000 per year for the next three years. Costs remained high for the first year after diagnosis but then reduced for the next two years.[62] Another study also concluded that it appears to be cost effective to provide specialised therapy for DID in outpatient settings.[63]

CULTURAL ASPECTS

Cultural aspects can influence dissociative identity disorder. In settings where normative possession is common, the fragmented identities may take the form of possessing, spirits, deities, animals or mythical figures. Possession form DID can be distinguished from culturally accepted possession states in that DID is involuntary, distressing, uncontrollable and often recurrent or persistent.[1]

DID is linked to perceptions of self and personhood, which are greatly influenced by culture. A study found that American students are more likely to write about themselves and use unqualified psychological attributes when asked the question – Who are you? In contrast, Japanese students write less about themselves and are less likely to describe themselves with psychological attributes. These differences can be attributed to cultural influences, especially how children are taught to express themselves.[64]

Culture plays a multifaceted role – both as the origin of trauma and as modifier of expression of the disorder.[30] The lower frequency of DID in Asia was previously considered to be due to a higher prevalence of possession disorder, reflecting a culture of polytheism and shamanism.[65]

It has been reported that the acceptance of meditative behaviours in India leads to a lower prevalence of pathological dissociation.[66] According to a study of case histories, the reason for a relative lack of dissociative identity disorder in India is due to most experiences of divided consciousness being in the form of spirit possession.[67] There has also been criticism regarding the pathologizing of possession, which is regarded as non-pathological and as a form of distress rather than disease in the Indian cultural scenario.[68]

Some argue that possession states and dissociative trance/possession are homologous while others believe that they must be understood in terms of their sociocultural context. It has been suggested that both of these deal with disruptions of agency, thus giving some commonality between them. It is important to consider sociocultural context in psychiatric disorders.[67]

Thus, in the case of a complex disorder such as dissociative identity disorder, cultural aspects will influence both prevalence and presentation of the disorder. As such diagnosis and management requires cultural context.

DISSOCIATIVE IDENTITY DISORDER IN THE MEDIA

Media portrayals regarding dissociative identity disorder are rarely positive. Movies like Split (2016)[69] and Glass (2019)[70] further portray the disorder in a negative light. There has also been an increasing community of those suffering from dissociative identity disorder on YouTube. There have also been several controversies with the portrayal of the disorder in this community even though it has also served to bring more attention to it.[71] The disorder is usually regarded as odd or fascinating without considering the struggles those with it face.

CONCLUSION

Dissociative identity disorder is a valid an established diagnosis. However, it is frequently misdiagnosed as well and underdiagnosed. The varying reported prevalence is due to lack of belief in the validity of the diagnosis, lack of awareness as well as clinician bias. Childhood trauma and abuse are very strongly linked with the development of the disorder. Many patients usually are in the mental health system for years before they are diagnosed and often have various comorbidities such as depression, or anxiety. They also frequently have issues with substance and alcohol abuse, eating disorders, other addictions, and problematic interpersonal relationships. There are various neurobiological changes associated with the disorder however there is limited consensus regarding their development. The goal of treatment is usually integration though this is not always possible. Safety and peaceful co-existence are much more important and achievable. Specific goal-oriented treatment that focuses on issues of trauma and follows guidelines has been demonstrated to show improvement in most patients. Cultural context matters greatly in DID as it influences both the development and manifestation of the disorder. Finally, media portrayals of DID are

rarely helpful in showing the reality of living with the disorder. Further research is required in multiple aspects of DID, especially the neurobiological changes observed as well as new and improved therapies. Formal guidelines need to be developed regarding dissociative identity disorder.

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