



A STUDY ON SOCIO DEMOGRAPHIC VARIABLES AND PRIOR STRESSORS OF DISSOCIATIVE DISORDER - A CROSS SECTIONAL STUDY.

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ABSTRACT

Objectives: To study the co-relationship of socio-demographic variables and stressors with conversion disorder

Methods: Study sample consists of 80 patients who attend the psychiatry out-patient department in ASRAM hospital and were diagnosed to be suffering from dissociative disorder and who fulfilled the inclusion criteria of the study were evaluated for socio-demographic variables and clinical presentations on a semi-structured pro forma. Study period from June 2018 to December 2018.

Results: Incidence of dissociative disorder was more among females(87.5%), age groups of 8-29 years(80%), more in illiterates (91.3%). Amongst the motor symptoms, paresis was the commonest presentation (55.4%). Most of the patients had stressors.

KEYWORDS : Conversion, dissociation, socio demographic profile.

INTRODUCTION:

Dissociation is defined as a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment. It manifests as disruptions of the normal integration between memories of the past, awareness of identity and immediate sensations and control of bodily movements.³

Physical disorders do not explain the symptoms and evidence for underlying psychological factor is required to make a diagnosis of Dissociative disorder. The presenting symptoms are unintentional and may mimic a neurological disorder. The proportion of patients in general medical settings with idiopathic medial symptoms for which no organic cause can be found have been estimated to range between 20-80%. It is quiet common for these idiopathic physical symptoms to co-occur with psychiatric disorder especially, with anxiety and mood disorders. Dissociative disorders have been found to occur more in females as compared to males and most common in rural populations, peoples with little education, those with low IQ and in low socio-economic groups.

Some Indian studies have focused on the clinical characteristics in conversion disorder. They have emphasized on the role of stressors in conversion disorder. "Role model"; has been reported in conversion disorder in some earlier studies. A role is an automatic learned, goal-directed pattern or sequence of acts developed under the influence of significant people in a growing child's environment. Patients with conversion disorder may unconsciously model their symptoms on those of someone important to them.³

Although dissociation is a common experience those with an actual dissociative disorder almost universally have a background of childhood trauma especially sexual and physical abuse. Over 99% of those diagnosed with dissociative disorder have a history of prolonged and severe childhood sexual abuse usually with an early age of onset and the abuser being one or more of the care givers

There has been no genetic link indicated. This is probably because everybody is capable of dissociation as a young child but few people are in the situation of having to use it on a regular basis. This regular usage as a defence leads to the ability to dissociate being retained into adulthood and therefore leads directly to dissociative disorders.

However new studies have shown that dissociation is a biological phenomenon- brain imaging has shown that associative pathways in the brain are shut down during the dissociative experience. This suggests that the dissociative experiences may well be real as opposed to imaginative.

HISTORY:

Hippocrates introduced the concepts of hysteria derived from the Greek word *hysterus* for womb/uterus which implied unwanted

migration of the organ to higher sites leading to unexplained physical symptoms. The study of Hysteria and dissociation begins at the end of the 18th century with the shift of these phenomena from religious to medical realm. There was a lot of confusion as to the classification of hysteria.

Freud and Joseph Breuer in *Studies in hysteria* used notions of fixed ideas and traumatic etiology, and introduced the cathartic method of cure for hysteria.

According to the latest classification it has been divided and classified as Somatoform disorder and dissociative disorder. Hysteria patients constitute a major proportion of psychiatric patient population in developing countries.

EPIDEMIOLOGY:

Epidemiological studies indicate that incidence and prevalence of Dissociative disorder vary across various countries and communities. They are more prevalent in developing countries compared to the developed western countries. Most studies have reported that dissociative disorders occur mostly in people younger than 30 years and the mean age to be 22 to 25 years. However Stone and colleague from the UK reported that the mean age of patients with dissociative motor disorders was higher than the mean age of the patients with dissociative convulsion.

Epidemiological studies in north America, Europe and Asia have found dissociative disorders to be common in samples of general population as well as in samples of psychiatric in-patients and out-patients.

This study is an effort to know the various types of clinical presentations and the related socio-demographic variables in conversion disorder

Clinical experience and research findings from the studies done on these two disorders independently also suggest that somatoform and dissociative disorders share some vulnerability factors such as dissociative experience,⁷ personality traits,¹⁰ illness behaviour,²⁰ and alexithymia, and that stress (e.g. sexual and physical abuse) may be important in the formation of both disorders.⁸

MATERIALS AND METHODS

Eighty new cases (every second) admitted to the Dept. of Psychiatry, ASRAM Medical College and Hospital, Eluru, from June 2018 to December 2018 who fulfilled the inclusion criteria of the study were enrolled for the study.

Inclusion criteria

Subjects of both sexes of age 6 years and above and fulfilling diagnostic criteria of dissociative (conversion) disorder according to

ICD-10 were included.

Patients who were willing to give proper consent for the study were included.

Exclusion criteria

Patients not willing to take part and those with comorbid physical illnesses, like diabetes mellitus, hypertension, stroke, neuropathies, movement disorders were excluded and comorbid other psychiatric illness, e.g., anxiety disorder, depressive disorder, etc., were excluded.

Tools used

1. The ICD-10 classification of mental and Behavioral disorders
2. A semi-structured pro forma to record socio-demographic details, including age, sex, education, occupation, domicile, marital status, family type, socioeconomic status and clinical diagnosis.
3. Modification of Dissociative experience scale-2(DES-2) by Eve Bernstein Carlson, Ph.D. & Frank W. Putnam M.D.:

It is a brief, self-reported measure of the frequency of dissociative experiences. The scale was developed to provide a reliable, valid, and convenient way to quantify dissociative experience. A response scale that allows subjects to quantify their experience for each item was used so that score could reflect a wider range of dissociative symptomatology than possible, using a dichotomus (yes/no) format. Procedure of study

All the study subjects were thoroughly evaluated on the basis of history and mental status examination, and the diagnosis was confirmed by a senior psychiatrist.

Then, the consent was taken from every patient before enrolling into the study. All the patients and their attendants were then evaluated to elicit necessary information required in our semi-structured pro forma.

Analysis of data

Data were analyzed by using Karl Pearson's correlation coefficient (Chi-square test). Data collected were analyzed using SPSS 20.

RESULTS:

Table 1 - sex of the patient

sex of the patient					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	F	70	87.5	87.5	87.5
	M	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

In this study it is found that the incidence of dissociative disorder was more among females (87.5%) as compared to males(12.5%).

Table 2 –Incidence of various Dissociative disorders

Incidence of various Dissociative disorders					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	dissociative motor disorder	60	75.0	75.0	75.0
	dissociative amnesia	8	10.0	10.0	85.0
	dissociative fugue	3	3.8	3.8	88.8
	trance and possession	5	6.3	6.3	95.0
	dissociative convulsions	3	3.8	3.8	98.8
	multiple personality disorder	1	1.3	1.3	100.0
	Total	80	100.0	100.0	

In this study sample 60 of them were suffering from Dissociative motor disorder(75%) followed by other Dissociative disorders.

Table 3- Age of the patient

Age of the patient					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	6-17	9	11.3	11.3	11.3
	18-29	64	80.0	80.0	91.3
	30-41	4	5.0	5.0	96.3
	42-53	3	3.8	3.8	100.0
	Total	80	100.0	100.0	

In this study it was found that the incidence of dissociative disorder was more among 18-29 years age group patients(80%) followed by 6-17(11.3%).

Table 4-Literacy

Literacy					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	literate	7	8.8	8.8	8.8
	illiterate	73	91.3	91.3	100.0
	Total	80	100.0	100.0	

In this study it was found that the incidence of Dissociative disorder was more among illiterates(91.3%) than literates(8.8%).

Table 5 - Occupation

Occupation					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	student	3	3.8	3.8	3.8
	unemployed	8	10.0	10.0	13.8
	employed	5	6.3	6.3	20.0
	housewife	64	80.0	80.0	100.0
	Total	80	100.0	100.0	

In this study it was found that the incidence of Dissociative disorder was more among housewife(80%) followed by unemployed(10%).

Table 6- Domicile

Domicile					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	urban	6	7.5	7.5	7.5
	rural	74	92.5	92.5	100.0
	Total	80	100.0	100.0	

Incidence of Dissociative disorder was most common among rural patients (92.5%) when compared with urban(7.5%)

Table 7 - Marital status

Marital status					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	unmarried	8	10.0	10.0	10.0
	married	71	88.8	88.8	98.8
	widow	1	1.3	1.3	100.0
	Total	80	100.0	100.0	

Incidence of Dissociative disorder was more among married(88.8%) followed by unmarried and widow.

Table 8 - socio economic status

socio economic status					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	lower	73	91.3	91.3	91.3
	middle	3	3.8	3.8	95.0
	upper	4	5.0	5.0	100.0
	Total	80	100.0	100.0	

In this study incidence of Dissociative disorder was more among patients belonged to lower socio- economic status.

Table 9- Summary Of Socio Demographic Characteristics And Its P Value.

variables	variants	n(%)	X2	P
Sex	Female	87.5	31.771	0.000 Significance
	male	12.5		
Age(years)	6-17	11.3	23.822	0.068 Not significant
	8-29	80.0		
	30-41	5		
	42-53	3.8		
Literacy	Illiterate	91.3	13.574	0.019 Not significant
	literate	8.8		
Domicile	Urban	7.5	13.574	0.019 Not significant
	rural	92.5		
Occupation	Student	3.8	48.213	0.000 significant
	Unemployed	10		
	Employed	6.3		
	housewife	80		
Marital status	Unmarried	10	5.258	0.873 Not significant
	Married	88.8		
	widow	1.3		
Socio economic status	Lower	91.3	23.685	0.008 Not significant
	Middle	3.8		
	upper	5		

In this study it was found that incidence of dissociative disorder was more among females(87.5%) as compared with males(12.5%). There was significant change in the incidence of dissociative disorder according to the sex of the sample cases. Incidence was more among age groups of 8-29years(80%) followed by 6-17 years age groups. There was no significant change in the incidence of dissociative disorder according to the age of the sample cases.more in illiterates(91.3%) than literates.In urban and rural it is more in rural (92.5%) than urban(7.5%).There was significant change in the incidence of dissociative disorder according to the occupation. Incidence of Dissociative disorder was more amonghousewife(80%) followed by unemployed(10%), employed(6.3%) and students(3.8%). It was more in married (88.8%) followed by unmarried(10%) and it was more in patients belonged to lower socio-economic status(91.3%), followed by middle (3.8%) and upper(5%).. There was no significant change in the incidence of dissociative disorder according to the marital status and socioeconomic status. Among dissociative disorder Motor symptoms were the most common type of clinical presentation (75%),dissociative amnesia(10%), dissociative fugue(3.8%), trance and possession(6.3%), dissociative convulsions(3.8%), and multiple personality disorder(1.3%). Amongst the motor symptoms, paresis was the commonest presentation (55.4%). Other motor symptoms included pseudo paralysis- (37.1%), aphonia /dysphonia (20%), hyperventilation (15.1%), dizziness (14.3%), limb paralysis (5.7%) and astasiaabasia (5.7%).

No subjects presented with isolated sensory symptoms but 1 present with dissociative anaesthesia/ sensory loss.Some of the subjects present with mixed dissociation.

During interview We evaluated for obvious precipitating factor prior to onset of illness, and we found that 50% subjects had family-related problems, 20% had school-related problems and the rest 20% had "love affair"-related problems. Family-related and "love affair"-related precipitating factors have positive association with increasing age, whereas study- /school-related factors have negative association with age.

DISCUSSION:

In this study conversion disorder was more common in females(87.5%) as compared with males(12.5%) , more among age groups of 18-29 years(80%) followed by 6-17 years age groups , more in illiterates (91.3%) than literates , more in rural (92.5%) than urban(7.5%), more among housewife(80%) followed by students(3.8%), unemployed(10%), employed(6.3%) , more in married (88.8%) followed by unmarried(10%) and it was more in patients belonged to lower socio-economic status(91.3%), followed by middle (3.8%) and upper(5%).

In this study, incidence of dissociative disorder is more among Age

group of 18-29 years(80%) followed by 6-17 years age groups .study of This corresponds with the findings by Vyas *et al.*,⁴Bagadia *et al.*⁵ and Choudhury *et al.*¹⁷.

In this study incidence is more among housewife(80%) followed by students(3.8%), unemployed(10%), employed(6.3%) , more in married (88.8%) followed by unmarried(10%) this corresponds with the findings by Jain and Verma *et al.*⁶ and Choudhury *et al.*¹⁷ who found housewives and married to be the predominant group.

Among different dissociative disorder types it was found that Motor symptoms were the most common type of clinical presentation (75%),dissociative amnesia(6.3%), dissociative fugue(5%), trance(5%), possession(2.5%), dissociative convulsions(3.8%), dissociative anaesthesia(1.3%) and multiple personality disorder(1.3%).

Amongst the motor symptoms, paresis was the commonest presentation (55.4%). Other motor symptoms included pseudo paralysis (37.1%), aphonia /dysphonia (20%), hyperventilation (15.1%), dizziness (14.3%), limb paralysis (5.7%) and astasiaabasia (5.7%). this findings Corresponds to the findings by Roelofs *et al.*⁷ who found paresis/paralysis to be the commonest.

Stress factor that were present prior to onset of illness were 50% subjects had family-related problems, 20% had school-related problems and the rest 20% had "love affair"-related problems. Family-related and "love affair"-related precipitating factors have positive association with increasing age, whereas study- school-related factors have negative association with age.

Further studies needed to properly evaluate stressors and significance of that stressors on the present problem. Early recognition of this stressors and proper solution of that problem decreased the incidence of the dissociative disorder.

CONCLUSION:

Despite its clinical importance, dissociation represents a semantically open term leading to conceptual confusions which in turn might restrict its value. Thus, it is fortunate that recent developments have attempted to refine current conceptualizations. These approaches converge in subdividing dissociation into qualitatively distinct types, i.e. pathological versus non pathological dissociation and detachment versus compartmentalization. However, the scientific and clinical value of the promising refinement of the dissociation theory remain to be proven.

Further research will need to focus on the following issues :

- further elaboration of the theoretical conceptualization.
- empirical validation of the emerging concepts
- applying the concept to clinical questions, in particular to aspects of classification, differential diagnosis, pathogenetic mechanisms and therapeutic relevance, possibly from a transcultural perspective.
- evaluation of the concept utility to the other domains involving dissociation, e.g. ASD, PTSD or borderline personality disorder.

Recent developments in the field will help to further establish the importance of dissociation in psychiatry, psychotherapy and psychosomatic medicine.

Limitations of study:

Study sample was small. As this was a cross sectional study, the pattern of symptomatology in subsequent recurrence could not be studied thereof.

Further studies needed to properly evaluate stressors and significance of that stressors on the present problem.

Ethical approval:

This study was approved by the Institutional Ethical Committee of the ASRAM Medical College, Eluru, A.P.

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