

Dissociative Experiences in Psychiatric Inpatients

Abstract

Dissociative disorders are conditions that involve disruptions of memory, awareness, identity, or perception. Data collected in diverse geographic locations underline the consistency in clinical symptoms of dissociative disorders. In this cross-sectional descriptive study, prevalence of dissociative experiences has been screened in hospitalized patients in psychiatric wards of Shiraz University of Medical Sciences in Iran. One hundred and sixty patients in two hospitals entered the study. Our tool to screen the prevalence of dissociative experiences was Dissociative Experience Scale (DES). Linear regression analysis shows that gender and age are predictors of high DES scores to some extent while psychiatric disorders are not good predictors. Age, gender and psychiatric disorders are poor predictors (almost 7%) of high DES scores in this study ($R^2=0.69$). In this study, patients with Borderline Personality Disorder had higher dissociative experiences based on DES score (Mean: 56.44), followed by Schizophrenic patients (Mean: 28.22) and patients with Bipolar Personality Disorder (Mean: 25.18). This study showed that we might be able to create a new category in psychological disorders based on dissociative experiences. As age, gender and psychological disorders were poor predictors of dissociative experiences, stronger predictors such as positive childhood psychological traumas could be responsible for dissociative disorders.

Keywords: Dissociation; Schizophrenia; Borderline personality disorder; Multicultural studies.

Research Article

Volume 6 Issue 6 - 2016

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Received: February 02, 2016 | **Published:** November 22, 2016

Abbreviations: DES: Dissociative Experience Scale; PTSD: Post Traumatic Stress Disorder; SCID: structured clinical interview for DSM-IV; CIDI: Composite International Diagnostic Interview; DDIS: Dissociative Disorders Interview Schedule; MDD: Major Depressive Disorder; OCD: Obsessive Compulsive Disorder; SPSS: Statistical Package for Social Sciences; ANOVA: Analysis Of Variance; LSD: Least Significant Difference

Introduction

Dissociation is defined as a perceived detachment of the mind from the emotional state or even from the body and it describes a wide array of experiences from mild detachment from immediate surroundings to more severe detachment from physical and emotional experience. Dissociative disorders are conditions that involve disruptions or breakdowns of memory, awareness, identity, or perception [1]. Dissociation may be sudden or gradual, transient, or chronic. Many studies in different geographic locations such as North America (2), Puerto Rico (3), Western Europe (4), Turkey (5), and Australia (6) have highlighted the consistency in clinical symptoms of dissociative disorders. These clinical case series have also underlined the association between childhood psychological trauma and dissociative disorders among all psychiatric disorders. Childhood sexual (57.1%–90.2%), emotional (57.1%), and physical (62.9%–82.4%) abuse and neglect (62.9%) are among them [2-6]. Although dissociation constitutes a diagnostic category separately, dissociative symptoms may be evident in almost all psychiatric disorders [7] including borderline personality disorder [8,9], conversion

disorder [10], and obsessive-compulsive disorder [11]. In those cases, dissociation is usually linked to childhood trauma history, suicidal attempt and self-mutilation behavior regardless of the main diagnosis [7]. Dissociative subtypes have been proposed for psychiatric disorders such as PTSD [8] and schizophrenia [12,13]. Different tools such as structured clinical interview for DSM-IV [SCID] and composite international diagnostic interview (CIDI) have not been suitable to screen dissociative disorders [14,15] and many large-scale studies using general psychiatric instruments have failed to diagnose dissociative disorders appropriately and have led to biased reports [16-18]. Studies using assessment tools screening dissociative disorders have been useful to resolve this matter. Dissociative experiences scale (DES) which is a subjective measure [19] and structured diagnostic interviews such as dissociative disorders interview schedule (DDIS), [20] and structured clinical interview for dissociative disorders (SCID-D), [21] are the most popular tools frequently used. Similar studies have taken place in other geographical locations worldwide and conducting this study together with the studies in Turkey is of great value to reflect the dissociative experiences of the region.

Materials and Methods

In this cross-sectional descriptive study, prevalence of dissociative experiences has been screened in hospitalized patients in psychiatric wards of Shiraz University of Medical Sciences in Iran. The goal of this survey is to screen the prevalence of Dissociative experiences in inpatients of two teaching hospitals and to evaluate and compare the prevalence of this

disorder in patients suffering from Schizophrenia, Bipolar, Major Depressive Disorder (MDD), Obsessive-Compulsive Disorder (OCD), Conversion and Borderline Personality Disorders. One hundred and sixty hospitalized patients in Psychiatric wards of the mentioned hospitals entered the study. After explaining the whole procedure to all individuals, informed consent was signed by all subjects. All individuals had completed 8th grade education and had no history of drug abuse. Mean age for individuals was 33.91 (SD=9.89) with minimum of 15 and maximum of 60. There was no difference between the mean age of women and men. The proportion of each mentioned disorder from the total 160 individuals were as follow: Schizophrenia 31.9%, Bipolar 16.9%, MDD 25.6%, OCD 10.6%, Conversion 7.5% and Borderline Personality Disorder 7.5%.

All individuals filled out a registration form consisting of their age, gender, duration of hospitalization and number of hospitalizations in Psychiatric wards. Our tool to screen the prevalence of dissociative experiences was Dissociative Experience Scale (DES), which is a psychological self-assessment questionnaire consisting of 28 questions that is being used worldwide for screening dissociative experiences in people. In each question individuals assess the degree of their experiences from zero to 100 and the total score results from adding all the scores in each question and dividing by 28. DES is used for screening and not for diagnosis. In this study, scores equal and below 15 are considered normal, 16-20 mild, 21-30 moderate and scores above 30 are considered as severe. After completion, data was analyzed and assessed by SPSS18 software, ANOVA and Chi-square tests and difference between groups were identified.

Results and Discussion

One hundred and sixty patients entered the study with DES score ranging from 0-100 with a mean score of 22.95. Ninety-one patients (56.9%) scored higher than 15; Seventy-two patients (45%) higher than 20; Sixty-one patients (38.1%) higher than 25 and forty-eight patients (30%) higher than 30. There was a significant difference between the scores of Borderline personality disorder versus other disorders. Breakdown of patients in normal, mild, moderate and severe categories is shown in Table 1. No difference was identified in both genders in this regard (Table 2). Table 3 illustrates the severity in different disorders. The mean DES score was 22.95 (SD=20.73), highest score belonged to patients with Borderline personality disorder (56.44) and Schizophrenic patients (28.22) and the minimum score belonged to OCD patients (8.20), (Table 4). The Variance analysis of DES scores in each disorder is reflected in tables 5-10. Based on post hoc test (LSD) there is a significant difference between Borderline personality disorder patients and other disorders. On the other hand, there was no significant difference between Conversion disorder patients and other disorders, except Borderline personality disorder patients. No significant difference was seen between patients of Borderline personality disorder and Schizophrenia, however there was a significant difference between former two disorders and MDD patients. As shown in Table 4, 61 women entered the study with mean score of 19.11 (Min: 0, Max: 89) and 99 men entered the study with mean score of 25.32 (Min: 0 and Max: 100). Correlation between gender, age and DES were analyzed by Pearson correlation. The result for gender and DES was 1.46 (p-value: 0.066), and this correlation

between age and DES was 1.98 (p-value: 0.012). Linear regression analysis shows that gender and age are predictors of high DES scores to some extent while psychiatric disorders are not good predictors (Tables 5-11). Age, gender and psychiatric disorders are poor predictors (almost 7%) of high DES scores in this study (R square=0.69) (Table 10).

Table 1: DES categories/breakdown.

	Normal	Mild	Moderate	Severe
Number	71	17	26	46
Percentage	44.4	10.6	16.2	28.8

Table 2: DES categories based on Gender

	Normal	Mild	Moderate	Severe	Total
Men	39	10	18	32	99
	54.90%	58.80%	69.20%	69.60%	61.90%
Women	32	7	8	14	61
	45.10%	41.20%	30.80%	30.40%	38.10%
Total	71	17	26	46	160
	100%	100%	100%	100%	100%

Table 3: DES categories in different psychiatric disorders.

	Normal	Mild	Moderate	Severe	Total
Bipolar	9	3	6	9	27
	12.70%	17.60%	23.10%	19.60%	16.90%
Borderline Personality	0	0	0	12	12
Conversion	6	3	2	1	12
	8.50%	17.60%	7.70%	2.20%	7.50%
Major depression	29	4	2	6	41
	40.80%	23.50%	7.70%	13.00%	25.60%
Obsessive compulsive	13	3	1	0	17
	18.30%	17.60%	3.80%	0%	10.60%
Schizophrenia	14	4	15	18	51
	19.70%	23.50%	57.70%	39.10%	31.90%
Total	71	17	26	46	160
	100%	100%	100%	100%	100%

Table 4: DES results in different Psychiatric disorders.

	No.	Mean	SD	Minimum score	Maximum score
Bipolar	27	25.1796	15.78	1	64
Borderline	12	56.4476	20.65	28	100
Conversion	12	19.1417	19.86	2	77
Major depression	41	12.3524	12.27	0	50
Obsessive Compulsive	17	8.2	7.54	0	22
Schizophrenia	51	28.2296	21.18	0	90
Total	160	22.953	20.73	0	100

Table 5: DES results in Borderline Personality Disorder versus other disorders.

	Categories	Mean Difference	Std. Error	95% Confidence Interval		Sig.
				Lower Bound	Upper Bound	
Borderline personality disorder	Bipolar Disorder	31.26787	5.92176	14.1781	48.3577	0
	Conversion Disorder	37.30583	6.96811	17.1963	57.4153	0
	Major Depressive Disorder	44.09506	5.60204	27.9279	60.2622	0
	Obsessive Compulsive Disorder	48.2475	6.43539	29.6754	66.8196	0
	Schizophrenia	28.21789	5.47627	12.4137	44.0221	0

Table 6: DES results in Bipolar Disorder versus other disorders.

	Categories	Mean Difference	Std. Error	95% Confidence Interval		Sig.
				Lower Bound	Upper Bound	
Bipolar disorder	Borderline personality disorder	-31.2679	5.92176	-48.3577	-14.1781	0
	Conversion Disorder	6.03796	5.92176	-11.0518	23.1278	0.911
	Major Depressive Disorder	12.82719	4.2303	0.6188	25.0356	0.033
	Obsessive Compulsive Disorder	16.97963	5.28458	1.7287	32.2306	0.02
	Schizophrenia	-3.04998	4.06229	-14.7735	8.6735	0.975

Table 7: DES results in Conversion Disorder versus other disorders.

	Categories	Mean Difference	Std. Error	95% Confidence Interval		Sig.
				Lower Bound	Upper Bound	
Conversion disorder	Bipolar Disorder	-6.03796	5.92176	-23.1278	11.0518	0.911
	Borderline personality disorder	-37.3058	6.96811	-57.4153	-17.1963	0
	Major Depressive Disorder	6.78923	5.60204	-9.3779	22.9563	0.831
	Obsessive Compulsive Disorder	10.94167	6.43539	-7.6304	29.5138	0.534
	Schizophrenia	-9.08794	5.47627	-24.8921	6.7162	0.561

Table 8: DES results in Obsessive Compulsive Disorder versus other disorders

	Categories	Mean Difference	Std. Error	95% Confidence Interval		Sig.
				Lower Bound	Upper Bound	
Obsessive Compulsive Disorder	Bipolar Disorder	-16.9796	5.28458	-32.2306	-1.7287	0.02
	Borderline personality disorder	-48.2475	6.43539	-66.8196	-29.6754	0
	Conversion Disorder	-10.9417	6.43539	-29.5138	7.6304	0.534
	Major Depressive Disorder	-4.15244	4.92366	-18.3618	10.0569	0.959
	Schizophrenia	-20.0296	4.78008	-33.8246	-6.2346	0.001

Table 9: DES in Major Depressive Disorder versus other disorders.

	Categories	Mean Difference	Std. Error	95% Confidence Interval		Sig.
				Lower Bound	Upper Bound	
Major Depressive Disorder	Bipolar Disorder	-12.8272	4.2303	-25.0356	-0.6188	0.033
	Borderline personality disorder	-44.0951	5.60204	-60.2622	-27.9279	0
	Conversion Disorder	-6.78923	5.60204	-22.9563	9.3779	0.831
	Obsessive Compulsive Disorder	4.15244	4.92366	-10.0569	18.3618	0.959
	Schizophrenia	-15.8772	3.5802	-26.2094	-5.5449	0

Table 10: DES in Schizophrenia versus other disorders.

	Categories	Mean Difference	Std. Error	95% Confidence Interval		Sig.
				Lower Bound	Upper Bound	
Schizophrenia	Bipolar Disorder	3.04998	4.06229	-8.6735	14.7735	0.975
	Borderline personality disorder	-28.2179	5.47627	-44.0221	-12.4137	0
	Conversion Disorder	9.08794	5.47627	-6.7162	24.8921	0.561
	Major Depressive Disorder	15.87717	3.5802	5.5449	26.2094	0
	Obsessive Compulsive Disorder	20.02961	4.78008	6.2346	33.8246	0.001

Table 11: Predictor variables in Dissociative Experiences in this study R=0.069.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Fix	49.546	7.992		6.2	0
Disorder	-1.183	0.912	-0.104	-1.297	0.197
Gender	-6.788	3.34	-0.16	-2.032	0.044
Age	-0.368	0.165	-0.176	-2.231	0.027

Conclusion

The goal of this study was to evaluate the dissociative experiences in psychiatric inpatients of Shiraz University of Medical Sciences. This study and all similar studies are based on personal feedbacks of interviewees that play a big role in validity of such studies. In this study the opposite relationship that had been proven before between age and degree of dissociative experiences [22] has been approved, therefore, we can conclude that this study has an acceptable validity and reliability. According to DES scores in this study we can divide patients into two groups with high dissociative experiences (Borderline personality, Bipolar disorders and Schizophrenia) and low dissociative experiences (Conversion, Obsessive-Compulsive and Major depressive disorders). Since our target population were all inpatients, and inpatients of Borderline Personality Disorder had severe symptoms which had resulted in their hospitalization, it may be translated in this way that this study divided patients with severe psychiatric symptoms from patients with milder symptoms based on DES score. This could be related to improper diagnosis in the hospitalized patients. Most probably by looking deeper and making better diagnosis among patients with high DES scores, some of them would be diagnosed as patients with Dissociative disorders in the same line as previous mentioned studies.

Dissociative experiences screened in this study (Mean DES score: 22.95) are greater than previous studies in North America (Mean DES score: 14.6) [23,24], Switzerland (Mean DES score: 13.7) [25], and Turkey (Mean DES score: 17.8) [26]. Also, 45% of patients in this study scored higher than 20 that is higher than previous study results in North America (30%) and Switzerland (20%) but less than the study results in Turkey (56%).

As Sar, V. (2011) has mentioned [27], data collected in diverse geographic locations in the world has underlined the consistency in clinical symptoms of dissociative disorders. Dissociative

patients report highest frequencies of childhood psychological trauma such as childhood sexual, emotional, and physical abuse and neglect, among all psychiatric disorders. In this study, patients with Borderline Personality Disorder had higher dissociative experiences based on DES score (Mean: 56.44), followed by Schizophrenic patients (Mean: 28.22) and patients with Bipolar Personality Disorder (Mean: 25.18). In this study there was no difference in the Mean DES score between men and women. In other studies in Germany [28] and Finland [29] there were also no difference in this regard, however, in a study in Turkey, there were twice the chance of higher score in women compared to men [30]. This difference could be justified by cultural difference and different childhood psychological traumas in different countries.

Linear regression analysis shows that gender and age are predictors of high DES scores to some extent while psychiatric disorders are not good predictors. This means that by controlling age and gender, there would be no difference in DES score in different disorders. These three factors (age, gender and disorder) are poor predictors (almost 7%) of high DES scores in this study (R square=0.69) (Table 10). Similar studies have concluded that childhood psychological trauma is a strong variable in predicting high DES scores. It may be concluded that our diagnosis of disorders were not accurate and by a deeper look and better diagnosis, some patients especially the ones with high DES scores and severe psychiatric symptoms would be diagnosed as "Dissociative Disorder" and would reflect positive childhood history of psychological traumas.

In other words, we may be able to define a subclass in each disorder based on childhood psychological traumas. Paying more attention to such subclasses related to Dissociative disorders would result in better management and treatment of such disorders. This study showed that we might be able to create a new category in psychological disorders based on dissociative

experiences. As age, gender and psychological disorders were poor predictors of dissociative experiences, stronger predictors such as positive childhood psychological traumas could be responsible for dissociative disorders.

Acknowledgements

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