### **Originals**

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# Dissociative disorder and traumatic events. A study of the Spanish population

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Dissociative disorder is relatively uncommon. It has been associated to the presence of traumatic events and especially to sexual abuse in childhood. Our study presents a clinical sample of 36 patients with dissociative disorder, prospectively evaluated with standardized scales in an outpatient department of general psychiatry. The sample is mainly made up of married (86.1%) women (34/36), from middle-low class with important comorbidity (38.9% affective disorders, 52.8% conversive disorders, 41.7% anxiety disorders and 38.9%, personality disorders). Our results show a high rate of childhood traumatic events (58.3%) and a background of sexual abuse (27.8%) in this population as well as other traumatic events in adulthood (55.6%). The prevalence of any traumatic event (27/36) is higher than in the general Spanish population. However, sexual abuse is only slightly higher than the estimated rate of sexual abuse in childhood. Higher scores on the traumatic event scale are correlated with the severity of dissociative symptoms. Only traumatic sexual traumas in childhood correlate with the severity of dissociative features measured by the DES (Dissociative Experiences Scale). Age of the first traumatic event does not correlate with severity of dissociative symptoms. A background of traumatic sexual abuse in childhood is the only factor related with a higher presence of comorbid affective disorders and conversive disorders.

Key words:

Dissociative disorder. Traumatic event. Child trauma. Conversive disorder. Spain.

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## Trastorno disociativo y acontecimientos traumáticos. Un estudio en población española

El trastorno disociativo es una patología relativamente poco frecuente que se ha asociado a la presencia de acontecimientos traumáticos en la infancia y, especialmente, a los abusos sexuales. Nuestro estudio presenta una muestra clínica de 36 pacientes que padecen un

Correspondence: Jesús Cobo Servei de Salut Mental Corporació Sanitària Parc Taulí Parc Taulí, s/n 08208 Sabadell (Barcelona) (Spain) E-mail: jcobo@tauli.cat trastorno disociativo, evaluados prospectivamente mediante escalas estandarizadas en las consultas habituales de psiquiatría general. La muestra se compone básicamente de mujeres (34/36), casadas (86,1%), de clase media-baja y con una importante comorbilidad (38,9 % trastornos afectivos, 52,8 % de conversión, 41,7 % de ansiedad y/o 38,9 % trastornos de personalidad). Nuestros resultados muestran una alta tasa de acontecimientos traumáticos en la infancia (58,3 %) y de antecedentes de abusos sexuales (27,8%) en esta población, así como de otros acontecimientos traumáticos (55,6 %) en la edad adulta. La prevalencia de cualquier acontecimiento traumático (27/36) es más alta que en población general española, pero sólo discretamente para el caso de los abusos sexuales en la infancia. La gravedad de las puntuaciones de acontecimientos traumáticos correlaciona con la gravedad de la clínica disociativa. La presencia de acontecimientos traumáticos en la infancia de tipo sexual se asocian con la gravedad de la clínica disociativa medida con la Escala de disociación DES. En nuestra muestra, la edad del primer acontecimiento traumático no muestra relación con la gravedad de la clínica disociativa. Los antecedentes de abusos sexuales en la infancia (y no otros) también se relacionan con una mayor presencia de trastornos afectivos y conversivos.

Palabras clave:

Trastorno disociativo. Trauma. Trauma infantil. Trastorno Conversivo. España.

#### INTRODUCTION

Dissociative disorder is a health problem of increasing interest, especially in Anglo-Saxon literature. The usual classic manifestations have been known for some time, but only recently has investigation begun on its different subtypes, the intercultural differences or the etiopathogenic aspects. The current classifications refer to dissociation as an alteration of the integrating functions of awareness, memory, identity and perception of the surroundings. There are different diagnostic criteria and, in fact, the rate of detection may vary according to the one we use.<sup>1-3</sup>

Epidemiological studies on dissociative disorders in the general population reveal a prevalence over life ranging from 3% to 11% for North America and Europe<sup>4</sup>. According to other epidemiological studies conducted, dissociative disorders are detected in approximately 20% to 35% of the adult clinical population and between 0.3% and 1.8% of the non-clinical population<sup>5</sup>. However, as is known, these disorders do not appear as the only diagnosis in these clinical populations, and they are accompanied by high levels of co-morbidity.<sup>6-9</sup> One of the data that frequently appears in the literature and is also quite constant in all the cultures studied up to now is the high frequency of association between the dissociation and the chronic child trauma.<sup>4,10,11</sup>

In any event, the dissociative disorder as a clinical condition is little diagnosed in our setting. We believe that the patients are frequently diagnosed of other disorders, including those of the DSM-IV Axis II, perhaps due to the comorbidity with which it generally appears.

#### **METHODS**

Adult patients from 18 to 65 years, seen consecutively in the Out-Patient Consultations of the Mental Health Center of the Corporació Sanitaria Parc Taulí (Sabadell, Barcelona) between April and September 2004, were included. All of them had to meet the diagnostic criteria of Dissociative Disorder according to the DSM-IV classification.¹ The project was approved by the Ethics Committee. Exclusion criteria were considered as Psychotic Disorders in general, Bipolar disorder, Mental Deficiency, Neurological Disorders and significant and current abuse or consumption of toxic agents (except for Tobacco).

The qualitative variables are expressed in frequencies and percentages. Quantitative variables are summarized with the mean, median and standard deviation (SD). Association between qualitative variables was evaluated with the  $\chi^2$  test or Fisher's exact test when more than 25% of the expected were under 5. The Mann-Whitney non-parametric test was used to determine the existence of association between quantitative parameters between categories of the qualitative variables. Correlation between quantitative variables was evaluated with Pearson's correlation coefficient. In all the contrasts of hypothesis, the null hypothesis with type I error or  $\alpha$  error under 0.05 were rejected.

#### **PROCEDURES**

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The patients of the sample who met the inclusion criteria and did not meet the exclusion ones were invited to participate voluntarily in the study by the professionals who usually attended them. After they were informed of its characteristics, they signed the Informed Consent and were administered an extensive sociodemographic questionnaire. An extensive clinical interview and psychopathological ex-

amination were also performed and the DSM-IV clinical diagnoses were agreed on based on the interview. One of the investigators involved (psychiatrist or clinical psychologist) made the diagnosis of the patients. This diagnosis was then confirmed with the DSM-IV criteria and by agreement between the principal investigator (MTB) and another one of the investigators (JC). A review of the clinical history was also made and the patient was asked to take a test series. The psychometric evaluation of the patients was made by an independent investigator outside of the therapeutic team.

The patients filled out the Spanish version of the DES questionnaire (Dissociative Experiences Scale) designed by Bernstein and Putnam<sup>12</sup> and the Questionnaire for Traumatic Experiences of Davidson et al.<sup>13</sup>

#### **RESULTS**

The sample was finally made up of 36 patients, 34 women and 2 men. Ages range from 24 to 65 years (mean 48.7, SD = 10.14). The patients came from a middle-low class social economic level. Most of them were married (86.1%) and had basic studies (52.8%). Prior to the development of the disorder, most performed unqualified work (86.1%). Their current socio-laboral situation is very precarious, since it has resulted in permanent work this capacity in 44.4% and sick leave in 19.4%.

In regards to the different subtypes of Dissociative Disorder found in the sample, the greater presence of patients who suffer Not Otherwise Specified Dissociative Disorder (NOS) according to the DSM-IV criteria (36/36) stands out. In regards to comorbidity with other disorders on the Axis I or Axis II, it is significant that up to 52.8% of the patients also fulfill Conversive Disorder criteria and even that many have conversive symptoms simultaneously with dissociative symptoms. In fact, only 4 patients had Conversive Disorder as their only comorbid disorder. Up to 38.9% of the patients (14/36) also had an associated unipolar affective disorder. Another 41.7% of the patients fulfilled criteria for different Anxiety disorders (15/36) and a significant group (38.7%) had different clinical diagnosis of personality disorders. A significant percentage of patients (58.3%) had more than one of all the comorbid diagnoses associated (21/36).

The valid results (n = 35) on the dissociative experiences scale (DES) provided mean scores of 37.1 (SD = 17.2, range 6.7 to 74.6). Scores between 30 and 40, all including (31.4% of the patients) correspond with those found in several previous studies. Scores above 40, much more severe, have been previously found in specific and very severe population and, in our sample, accounts for a significant percentage (42.8%).

The mean score on the Questionnaire for Traumatic Experiences was 11.6 (SD = 6.2, range 0-19). The breakdown

of the different traumatic events detected is shown in table 1. Mean age of the first traumatic experience was 18 years (SD =13.5, range of 3 to 52 years). Patients with trauma in the childhood age logically have higher scores on the Questionnaire for Traumatic Experiences of Davidson and very especially those patients with sexual childhood trauma (figure 1), but not in the case of the patients with drama in the adult age.

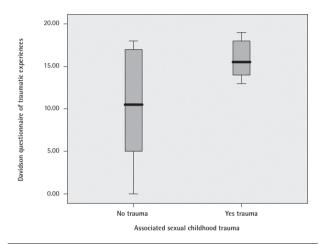


Figure 1 Relationship between the presence of sexual traumatic experiences in childhood and score of Davidson Scale.

The scores on the Dissociative Experiences Scale (DES) correlated with the scores on the Questionnaire for Traumatic Experiences of Davidson (Pearson significant at bilateral 0.05 level). The scores on the DES dissociative scale were greater (but not significantly) in the patients who had had different traumas in general in childhood, while it was significantly greater in the patients who experienced sexual childhood traumas (figure 2). The presence of traumas in the adult age also did not correlate with the severity of the dissociative symptoms. Age of the first traumatic experience or presence of comorbid Conversion Disorder also did not correlate with the severity of the dissociative symptom. Presence of sexual childhood traumas did correspond with a significantly greater comorbid presence of Dissociative Fugue, Conversion disorder and Affective disorders (Chi squared 0.05), but not with the presence of Anxiety disorders or a clinical diagnosis of Personality Disorders at the time of the evaluation.

#### DISCUSSION

In our sample, both severity of the symptoms (up to 42.8% with scores over 40 on the DES scale) as well as high frequency of sexual abuses (27.8%) stand out.

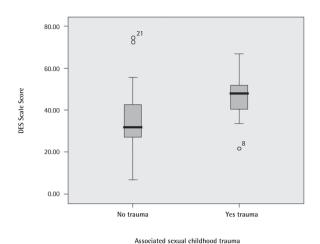


Figure 2 Relationship between the presence of sexual childhood trauma and score on Dissociative Experiences

Kendall-Tackett et al.<sup>14</sup>, of the Family Research Laboratory of the University of New Hampshire, made a review of up to 45 previous studies that clearly demonstrated that sexually abused children had 15%-45% more risk of suffering fears, post-traumatic stress, behavior disorders, unusual sexual behaviors and low self-esteem, among other problems, compared to those children who did not suffer them. However, none of these symptoms were specific. Even more, some of these symptoms were more typical of certain ages than others. In fact, up to one third of all these sexually abused children did not have any symptom when they were evaluated by this group.

The characteristics of abuse by themselves were important factors in the predisposition to present symptoms and up to two thirds of these children recover at 12 or 18 months. These authors, therefore, propose that there is no single specific syndrome in sexually abused children.20 In any case, up to 60% of the abused children may present some psychological disorder. These symptoms would be more severe based on severity, frequency and duration of the abuses. Type of force exercises and emotional closeness of the aggressor regarding the victim also may have an influence.

#### **CONCLUSIONS**

Scale (DES).

Our preliminary conclusions support the relationship of the childhood traumas in general and, specifically, of sexual childhood traumas, in the appearance of Dissociative Disorder in our setting and especially in those subgroups of greater severity. Thus, these aspects should be specifically questioned in the evaluation interviews of these cases. However, it would be advisable to make an open anamnesis,

Table 1	Traumatic Events (n = 35)	
Traumatic event	s in childhood (including minors of 16 years)	
Sexual childhood trauma (abuses or violations)		10 patients (27.8 %)
Non-sexual maltreatment, serious negligence or abandonment		3 patients (8.5 %)
Visualization (1) or accidental involvement (1) in catastrophic situation of a family member		2 patients (5.7 %)
Serious life-threatening (4 drownings, 1 burn) or of a close family member (1)		6 patients (17.1 %)
Traumatic loss of significant person (1), of a parent (4) or both (1) during childhood*		5 patients (14.2 %)
Total		21 patients (58.3 %)*
Traumatic event	s in adult age (over 16 years)	
Victims of natural disaster (earthquake)		1 patient (2.8 %)
Serious work accidents		4 patients (11.4 %)
	Important traffic accidents	
Important traffi	accidents	5 patients (14.2 %)
Important traffic		1 patient (2.8 %)
Traumatic health		
Traumatic health Subjectively very	problem	1 patient (2.8 %)

without orienting the answers, due to the risk of inducing recall in this population group, perhaps especially defenseless and easily influenced. The use of dissociation and trauma evaluation scales, respectively, may help to objectively evaluate these aspects. These evaluations may play an important role in the treatment course.

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