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Childhood trauma in substance use disorder and depression: An analysis by gender among a Brazilian clinical sample[☆]

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ABSTRACT

Objective: In this study, we compared the frequency and intensity of childhood traumas in alcohol- or other drug-dependent patients, in patients with depression, and in a control group without psychiatric diagnoses.

Methods: The study had a retrospective design of a clinical sample of men and women from the groups listed above. They were evaluated by the same standardized instrument: the "Childhood Trauma Questionnaire."

Results: A higher frequency and intensity of emotional, physical, and sexual abuse were found in alcohol- and other drug-dependent patients than in patients with depression, who, in turn, presented significantly higher proportions than the control group. In all of the cases, the frequency was higher among women than men.

Conclusion: Because of the high frequency and intensity of childhood traumas among alcohol- or other drug-dependent patients and depressed patients, the assessment of problems due to childhood traumas among these patients is essential to a better understanding of the etiology of those disorders and to their treatment.

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Introduction

Some studies in the literature suggest that victims of trauma during childhood present a higher use of drugs and alcohol than those who were not subject to such abuses (Anda et al., 2006; Dube, Anda, Felitti, Edwards, & Croft, 2002; Dube et al., 2005; Nelson et al., 2006). Consequently, sexual, physical, and emotional abuses are risk factors for the development of drug dependence in the medium- and long-term (Duran et al., 2004). In a review on this issue, Arellano (1996) concluded that even though most studies have found a relation between drug dependence and sexual or physical abuse, the nature and the characteristics of this interaction are still not very clear. Some studies have found a history of sexual and physical abuse among people who are under treatment for drug dependence (Arellano, 1996; Brems, Johnson, Neal, & Freemon, 2004; Jasinski, Williams, & Siegel, 2000; Walton-Mossa & McCaulb, 2006) as well as a high frequency of drug use and dependence among people who were victims of sexual and physical abuse, both in prospective (Jasinski et al., 2000) and retrospective studies (Anda et al., 2006; Dube et al., 2005; Mirsal, Kalyoncu, Pektas, Tan, & Beyazyürek, 2004). Other studies have suggested that some failures in the treatment of drug-dependent patients might stem from the lack of an adequate investigation of the history of previous sexual or physical abuse (Arellano, 1996).

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The prevalence of sexual abuse during childhood in women who abuse alcohol or other drugs can be as high as 70% (Miller, Wilsnack, & Cunradi, 2000; National Institute on Alcohol Abuse and Alcoholism [NIAAA], 1990). Furthermore, women who reported a history of childhood sexual abuse had a higher frequency of abusing or being dependent on alcohol or other drugs compared with women in the general population (Simpson & Miller, 2002), with a frequency up to three times higher (NIAAA, 1990). Studies have also shown that childhood sexual abuse was typically more severe in women with alcohol or drug abuse or dependence than in a control group of women without a history of childhood abuse (Miller, Downs, & Tesla, 1993). The relation between the occurrence of abuse and other mental disorders has also been reported in the literature (Anda et al., 2006; Mac Millan et al., 2001). A significantly higher frequency of depression, anxiety, and anti-social behavior was found among people who reported childhood physical abuse (Chapman et al., 2004; Mac Millan et al., 2001; Molnar, Buka, & Kessler, 2001). According to many authors, a history of physical and sexual abuse in childhood is a strong predisposing factor for major depression in adulthood (Anda et al., 2002; Browne & Finkelhor, 1986; Chapman et al., 2004; Widom, DuMont, & Czaja, 2007).

Most of the studies carried out abroad have focused on women who had been abused. Few studies have examined groups of men or both genders as part of the sample. Moreover, there are few studies conducted with Latin American samples. Studies have shown that a history of childhood trauma is more frequent and more severe among women with alcohol or drug dependence and those with depression than among men with the same diagnoses (Brems et al., 2004; Galaif, Stein, Newcomb, & Bernstein, 2001; Hyman, Garcia, & Sinha, 2006, Zlotnick, Mattia, & Zimmerman, 2001). There is also a higher frequency of childhood trauma among women than among men, as reported in studies carried out with the general population (Bendixen, Muus, & Schei, 1994; Briere & Elliott, 2003; Molnar et al., 2001).

We hypothesized that childhood traumas are more frequent or severe in alcohol- or drug-dependent patients than in those with depression or without psychiatric diagnosis, as well as more prevalent among women than among men. In this study, a sample of depressed patients was utilized as a "positive psychopathology control" in order to evaluate whether substance-related disorders have a unique relationship with childhood trauma experiences or if this type of experience is a generic risk factor for psychiatric disorders.

The main objective of this study was to analyze the frequency and intensity of child neglect or abuse in subjects who searched for outpatient treatment for alcoholism, drug dependence, or depression and to compare these indicators with those observed in a control group of subjects who searched for outpatient treatment for general medical problems. Our secondary objectives were to evaluate the influence of gender in those indicators and to compare Brazilian data collected by the Childhood Trauma Questionnaire with data reported in the literature in order to assess possible cultural influences.

Method

Subjects

The study was developed in specialized outpatient treatment settings for alcohol dependence, drug dependence, or depression in the State University of São Paulo (Faculdade de Medicina UNESP-Botucatu) between January 2003 and March 2004. Two hundred and ninety-five patients were included in the study; 85 (50 male and 35 female) were alcohol-dependent, 70 (35 male and 35 female) were dependent on other drugs, and 70 patients (35 male and 35 female) had a diagnosis of unipolar depression or dysthymia. Most of the patients (63.7%) had been under outpatient treatment for more than 2 years by the time of the interview. Patients with bipolar disorder, mental retardation, schizophrenia, or organic disabling disorders. which could impair the application of questionnaires, were excluded. The inclusion in each psychiatric group was based on a clinical psychiatric diagnosis made by psychiatrists from the specialized outpatient clinics and confirmed by the Mini International Neuropsychiatric Interview (MINI) applied by the researchers (Amorim, 2000). Dually diagnosed patients were allocated according to their primary diagnosis. The control group included 70 patients (35 male and 35 female) who did not meet MINI criteria for alcohol and/or other drug dependence, dysthymia, or unipolar depression and had searched for treatment for non-psychiatric disorders in a Primary Care Health (PHC) setting. All of the patients who attended the outpatient clinics at the beginning of the study were invited to participate through the direct approach of the researcher, until the previously determined sample size was reached. The control group was composed of patients who had scheduled appointments for general medical exams at the PHC center associated with the Faculdade de Medicina UNESP—Botucatu in the same weeks when the patients in the other groups were interviewed. After the study had been explained, the subjects signed a written informed consent. The Committee of Ethics in Research of UNESP (208/2001) and UNIFESP (986/02) approved the study protocol. The researcher interviewed the patients in an isolated location in order to ensure confidentiality.

Instruments

Neglect (physical or emotional) and/or abuse (emotional, physical, or sexual) were evaluated by the "Childhood Trauma Questionnaire" (CTQ) (Bernstein & Fink, 1998), a questionnaire of 28 items that evaluate retrospective experiences of childhood abuse and neglect. This instrument, standardized and validated by Bernstein and Fink (1998), presents good levels of internal consistency and reliability (Bernstein et al., 1994, 2003; Bernstein, Ahluvalia, Pogge, & Handelsman, 1997; Bernstein & Fink, 1998) when applied to alcohol- or drug-dependent patients, psychiatric patients, and the general population. The scoring is based on a five-point scale (Likert-type), varying from "never" to "frequently" according to the frequency in which

the experiences took place. Accordingly, a higher score indicates a greater severity of problems. The authors of this work translated the instrument into Portuguese, back-translated it, and submitted it to a bilingual expert who confirmed that the original meaning had been preserved. Before application to the selected patients, the instrument was applied to a pilot sample.

According to the norms in the CTQ manual, the severity of each trauma should be rated as: *emotional abuse*: up to 8—none or minimal, from 9 to 12—low to moderate, from 13 to 15—moderate to severe, and over 15—severe to extreme; *physical abuse*: up to 7—none or minimal, from 8 to 9—low to moderate, from 10 to 12—moderate to severe, and over 12—severe; *sexual abuse*: up to 5—none or minimal, from 6 to 7—low to moderate, from 8 to 12—moderate to severe, and over 12—severe to extreme; *emotional neglect*: up to 9—none or minimal, from 10 to 14—low to moderate, from 15 to 17—moderate to severe, and over 17—severe to extreme; *physical neglect*: up to 7—none or minimal, from 8 to 9—low to moderate, from 10 to 12—moderate to severe, and over 12—severe to extreme.

When the subject reported having been a victim of childhood sexual abuse, it was investigated if he/she had already talked about this trauma to a health professional or to his/her psychiatrist.

History of psychoactive substances and alcohol use and socio-demographic data were evaluated by the "Addiction Severity Index" (ASI 5th edition) (McLellan et al., 1992). We used the version translated into Portuguese (Formigoni & Castel, 1999). Psychiatric diagnosis—We used the Brazilian version of the Mini International Neuropsychiatric Interview (MINI), vali-

Statistical analyses

The Chi-square test was utilized to test the association between variables and to compare groups on categorical variables. One-way ANOVAs, followed by the Newman–Keuls post hoc test, were utilized to compare group means. Logistic regression analyses were utilized to evaluate the influence of each type of abuse and neglect on the diagnosis classification, comparing each diagnostic group with the control (0 = control group; 1 = diagnostic psychiatric group). The analyses were made using the statistics software Statistica (Statsoft, 1997). The level of significance of 5% was adopted for all cases.

Results

Table 1 shows the socio-demographic data of the patients, classified according to their diagnosis and gender. We detected some significant differences among groups regarding marital status and age, with a higher proportion of young single people among the drug-dependent patients than in the other groups (marital status: p < .001; age in years: p < .001). The patients with depression (male and female) were older (p < .01) than the patients in the other groups.

Childhood trauma frequency

Fig. 1 shows that in relation to the frequency of abuse and neglect, as evaluated by the CTQ, there were significant differences among groups in regards to emotional abuse (p < .001), physical abuse (p < .001), sexual abuse (p < .001), emotional neglect (p = .01), and physical neglect (p < .001).

Comparing childhood traumas among women by diagnosis

dated by Amorim (2000), to determine the psychiatric diagnoses.

Women in the alcohol- or drug-dependent and depression groups reported a significantly higher frequency of emotional, physical, and sexual abuse than women in the control group (p < .05). Patients dependent on alcohol or other drugs reported a four times higher frequency of emotional and sexual abuse than those in the control group (p < .001) and two times higher than those with depression (p < .05). The women dependent on alcohol reported a higher frequency of physical abuse than those in the depression group (p = .001) as well as a higher frequency of physical neglect than among those in all of the other groups (p < .05), which were similar to each other.

Comparing childhood traumas among men by diagnosis

Men in the alcohol- or drug-dependent and depression groups reported a significantly higher frequency of physical abuse and emotional neglect than men in the control group (p < .05). Men in drug-dependent or depressed groups also reported a higher frequency of physical neglect than men in the control group, and alcohol-dependent men reported a higher frequency of sexual abuse than control men. The drug-dependent patients presented a higher frequency of emotional (p < .01) and sexual abuse (p < .01) than men in all of the other groups. The alcohol-dependent patients presented a higher frequency of sexual abuse than men with depression (p = .04); however, they reported a lower frequency of physical abuse than the drug-dependent patients (p = .004) and a lower frequency of physical neglect than the depressed patients (p = .03).

 Table 1

 Socio-demographic data of patients dependent on alcohol and drugs, patients with depression, and patients without a psychiatric diagnosis (control group).

	Alcohol		Drugs		Depression		Control			
	Women N=35	Men N = 50	Women N=35	Men N=35	Women N=35	Men N=35	Women N=35	Men N=35		
Marital status (%)*										
Married	37.1	58.0	42.9	22.9	60.0	65.7	57.2	60.0		
Single	14.3	16.0	40.0	62.9	8.6	20.0	28.6	40.0		
Widowed	11.4	4.0\$	0	0	17.1	5.7	5.7	0		
Separated	37.1	22.0	17.1	14.3	14.3	8.6	8.6	0		
Age in years $(\text{mean} \pm SD)^*$										
	42 ± 9	49 ± 10	33 ± 10	32 ± 11	53 ± 14	52 ± 14	43 ± 17	41 ± 20		
Race (%)										
Caucasian	78.0	60.0	80.0	80.0	82.9	82.9	74.3	74.3		
African-Brazilian	25.7	8.0	8.6	2.9	14.3	5.7	11.4	8.6		
Mixed	14.3	14.0	11.4	17.1	5.7	11.4	14.3	17.1		
Family annual income US\$ (mean \pm SD)	3420 ± 3158	6465 ± 7687	3353 ± 2708	3600 ± 2655	3585 ± 3683	7312 ± 5707	5940 ± 6030	3315 ± 3045		
Schooling in years of education (mean $\pm SD$)	6.8 ± 3.9	5.8 ± 3.5	8.4 ± 3.7	7.5 ± 3.5	5.9 ± 4.3	7.1 ± 5.3	9.2 ± 3.7	6.9 ± 4.5		

^{*} p < .001.

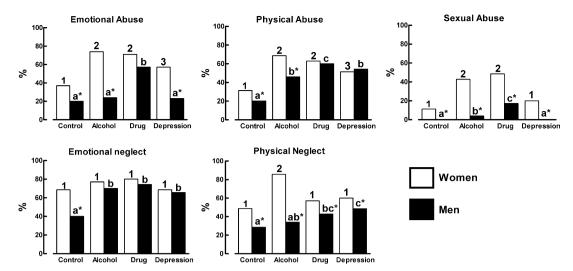


Fig. 1. Frequency of emotional, physical and sexual abuse and emotional and physical neglect, according to CTQ (Childhood Trauma Questionnaire in alcohol- (50 men and 35 women) and drug-dependent patients (35 men and 35 women), patients with depression (35 men and 35 women) and in a control group (35 men and 35 women). Data are expressed as percentage of cases, by diagnosis group and gender. X^2 tests were applied. Similar numbers indicate no difference between women groups and different numbers indicate significant differences (p < .05). Similar letters indicate no difference between men groups and different letters indicate significant differences (p < .05).

Comparing childhood traumas between men and women by diagnosis

Women dependent on alcohol or other drugs and those with depression reported a higher frequency of emotional and sexual abuse than men in the same groups (p < .05). Women dependent on alcohol also reported a higher frequency of physical abuse than men in the same group (p = .001). Concerning physical neglect, women with psychiatric diagnosis in all groups presented a higher frequency than men in the same group (p < .05). Furthermore, women in the control group reported a higher frequency of physical abuse (p < .03), emotional neglect (p < .001), and physical neglect (p = .003) than men in the same group.

Among those who reported childhood sexual abuse, most of them (92.5%) had never talked to their psychiatrists about the traumatic experience.

Childhood trauma intensity

men and women from the same diagnosis group.

One-way ANOVAs detected significant differences among all groups regarding the mean (+SD) scores of the patients on the Childhood Trauma Questionnaire (CTQ) in all the types of abuse (emotional: p < .001; physical: p < .001; sexual: p < .001) and neglect (emotional: p < .001; physical: p < .001).

Comparing childhood trauma intensity among women according to diagnosis group

Women dependent on drugs or alcohol and those with depression had significantly lower scores on the subscale of emotional abuse than women in the control group (Newman–Keuls, p < .05). Women dependent on alcohol or other drugs also had higher scores of physical and sexual abuse than those in the control group (Newman–Keuls, p < .05), and women dependent on alcohol or with depression had higher scores of physical neglect than those in the control group (Newman–Keuls, p < .05). Women dependent on drugs or alcohol had higher scores of sexual abuse than women with depression (p < .05), but they did not differ between each other.

Comparing childhood trauma intensity among men by diagnosis

Among men, there were no significant differences between groups as to physical and sexual abuse or emotional neglect. Depressed men reported a higher severity of physical neglect than those in the control group (Newman–Keuls, p < .05). The drug-dependent men presented a greater severity on the subscale of emotional abuse than men in all of the other groups (Newman–Keuls, p < .05).

Table 2Contribution of history of childhood abuse or neglect as risk factors to the diagnoses of depression, alcohol or drug dependence, determined by logistic regression analyses (Odds ratio), considering the control group as reference, according to gender. In bold *p* < .05.

	Men						Women						
	Alcohol N=55		Drug N = 35		Depress N=35	ion	Alcohol N=35		Drug N = 35		Depression N=35		
	OR	р	OR	р	OR	р	OR	р	OR	р	OR	p	
Emotional abuse Physical abuse Sexual abuse	.5 3.2	.30 .04	2.7 3.4	.11 .04	.7 3.8	.66 . 03	1.5 5.9 5.4	.63 . 02 . 02	1.5 4.9 8.5	.57 .04 .01	2 2.4 2	.33 .18 .35	
Emotional neglect Physical neglect	3.7 .7	.02 .54	2.4 .8	.14 .73	1.7 1.1	.36 .84	.1 6	.03 .03	.5 .4	.43 .22	.4 1.1	.19 .94	

Comparing childhood trauma intensity between men and women

Comparing men and women with the same diagnosis, we observed that women dependent on alcohol presented higher levels of physical, emotional, and sexual abuse as well as physical and emotional neglect than men in the same group (Newman–Keuls, p < .05).

The drug-dependent women presented higher levels of sexual abuse than men in the same group, but they presented a similar frequency regarding the remaining types of abuse or neglect. Women with depression presented higher levels of emotional abuse than the men in the same group.

Logistic regression analysis

Table 2 shows the results of two logistic regression analyses (performed separately for men and women) considering the absence (0) or presence (1) of psychiatric diagnoses as the dependent variable. Although, marital status and age were significant in the univariate analysis, they did not enter into the regression model as covariates because their inclusion did not significantly affect the model. Emotional abuse was not significantly associated with any diagnoses; however, physical abuse was significantly associated with all diagnoses, except depression. Sexual abuse, which was included as a predictor variable only in the women group due to its low prevalence among men, was significantly associated with alcohol and drug dependence but not with depression. Emotional neglect was significantly associated with alcohol dependence in men and women, but physical neglect was associated with that diagnosis only among women.

Discussion

This is the first study carried out in Brazil that compared alcohol- and/or drug-dependent patients, patients with depression, and controls (people without a diagnosis of alcohol/drug dependence or depression) in relation to the frequency and severity of the five types of child maltreatment, using a standardized instrument.

In general, we observed a higher frequency and severity of these traumas among abusers of alcohol and other drugs than in patients with depression or in the control group, with a higher frequency among women than men. Histories of physical and sexual abuse were significant risk factors for both alcohol- and drug-dependent women, though physical neglect was only a risk factor for other drug-dependent women. History of childhood abuse and neglect were not significant risk factors for depressed women. Physical abuse was a significant risk factor for alcohol- and drug-dependent and depressed men, though emotional neglect was only a risk for other drug-dependent men.

Most of the studies that evaluated the history of childhood abuse focused only on physical and sexual abuse; however, evidence has showed that emotional abuse and neglect (physical or emotional) are also important traumas to be investigated (Kaplan, Pelcovitz, & Labruna, 1999; Walker et al., 1999). As we observed in these clinical populations, the frequency of childhood abuse and neglect is very high. Even though there are few data on the prevalence of abuse in Brazil, a study carried out in Porto Alegre city found a frequency of sexual abuse of 2.3% among adolescents (Polanczyk, Zavaschi, Benetti, Zenker, & Gammerman, 2003). Due to the lack of national data on the subject, we compared our data with those reported in studies carried out in other countries.

Table 3 presents a comparison of our data regarding the frequency of childhood abuse and neglect with those reported in the literature, most of which used the CTQ. We analyzed the studies carried out with samples of the general population, with psychiatric patients, and with patients dependent on alcohol and other drugs, taking gender into consideration.

Comparison of childhood trauma frequency observed in our study with that reported in the literature

Patients in the control group had the lowest frequency of emotional and physical abuse, which is in agreement with other studies (Bernet & Stein, 1999; Sweet, Chaves, Cohen, Survey, & Compaine, 1991).

Table 3Comparison of the frequency and intensity of negligence and abuse found in this study and in international ones.

Authors Cour	Country	Year	N	Abuse (Frequency in %)						Neglect (Frequency in %)				Abuse by the CTQ scale (Means)						Neglect by the CTQ scale (Means)				Instru ment
				Emotional		Physical S		Sexua	Sexual En		Emotional Pl		Physical		ional	Physical		Sexual		Emotional		al Physical		
				o ⁷	9	o ⁿ	9	♂"	9	o ⁿ	9	♂	9	o ⁷	9	o ⁷	9	o ⁿ	Q.	o ⁷	9	o ⁷	_ Р	
Patients with depressio	n																							
In this study	Brazil	2004	70	22.9	57.1	54.3	51.4	0	20.0	65.7	68.6	48.6	60.0	7.4	10.4	9.4	9.2	5.0	6.1	12.5	13.7	9.2	10.5	CTQ
Twomey et al.	USA	2000	53		43.4		56.6		67.9		66.0		37.6		13.1		11.7		11.2		13.5		8.2	CTQ
Bernet and Stein	USA	1999	47	49.0		60.0		60.0																CTQ
Hayden and Klein	USA	2001	86				27.9		29.1															EHE
Harkness and Monroe	USA	2002	76		30.3		67.1		52.7															CECA
Harkness and Wilder	USA	2002	76		26.0		19.0		21.0															CECA
Anda et al.	USA	2002	1159	21.6		43.4		29.4																CTS
Drug and alcohol-deper	ndents																							
CTQ Manual	USA	1998	378											9.3	10.7	9.1	9.0	6.7	10.1	10.3	10.9	7.7	7.1	CTQ
In this study	Brazil (alcohol)	2004	85	24.0	74.3	46.0	68.6	4.0	42.9	70.0	77.1	34.0	85.7	7.4	12.7	8.3	11.0	5.1	8.7	11.1	14.8	7.5	10.8	CTQ
In this study	Brazil (drugs)	2004	70	57.1	71.4	60.0	62.9	17.1	48.6	74.3	80.0	42.9	57.1	10.5	12.9	9.0	10.0	5.9	9.2	12.2	13.4	7.3	9.0	CTQ
Medrano et al.	USA	1999	181		45.9		55.2		60.2		83.4		59.7											CTQ
Schäfer et al.	Germany	2007	100	27		20		18		34		25		9.7		7.5		6.6		12.2		7.9		CTQ
Roy	USA	2004	1280								9.9	9.8									8.4	22.6	13.3	CTQ 34
Roy	USA	2001	214											9.7		10.2		8.3		21.5		12.5		CTQ 34
Langeland et al.	Holland	2004	155		0	9.8	13.1	33.3																CTQ 53
Lundgreen et al.	Sweden	2002	55		56.4		60.0		70.0		80.0		80.0		34.2		15.8		15.5		52.3		17.4	CTQ 53
Anda et al.	USA	2002	539	24.1	88.4	30.2																		CTS

CTQ = Childhood Trauma Questionnaire, version with 28 items.

CTQ 34 = Childhood Trauma Questionnaire, version with 34 items.

CTQ 53 = Childhood Trauma Questionnaire, version with 53 items.

CTS = Conflict Tactics Scale + own questions and questions adapted from other authors.

CECA = Childhood Experience of Care and Abuse Scale

EHE = Early Home Environment.

Note₁: the values in the intermediate area between men (σ) and women (φ) regard studies in which the data was not divided by gender.

Note₂: the mean values of the different CTQ versions should not be compared in terms of absolute values, since the maximum and minimum values of the sub-scales are different.

We found only one study in the literature that evaluated the frequency of sexual abuse among alcohol- and drug-dependent men (Langeland, Draijer, & Van den Brink, 2004) and no studies evaluating depressed patients, highlighting the need of more studies in this area. Comparing the abovementioned studies with ours, we observed a lower frequency of sexual abuse in the alcohol- and drug-dependent men in our sample.

The frequency of emotional and physical abuse among drug-dependent women observed in our study was similar to the frequency reported in the literature. Among women dependent on alcohol, lower proportions of emotional neglect, similar proportions of emotional or physical abuse, and higher proportions of physical neglect were observed. The frequency of sexual abuse among women dependent on drug or alcohol reported in the literature was higher than that in this study. In this study, we observed a higher frequency of emotional abuse and a similar frequency of emotional neglect among women with depression compared with those reported in the literature. The frequency of physical (19–67.1%) and sexual (20–67.9%) abuse among women with depression presents a high variability in the literature, and the frequencies observed in this study are inside these intervals.

The high levels of variability found in the frequency of abuse in the various studies in the literature might be due to differences in the methodology used in the studies, such as different instruments and data collection methods, specific characteristics of the population studied, and methodology employed in the statistical analysis. Moreover, in studies carried out with the CTQ, there are reports using different versions, and some studies did not mention the cutoff point for the definition of abuse or neglect, which makes it difficult to compare the results of our study with those of others.

Comparison of childhood trauma frequency among the four groups, taking gender into account

The frequency of sexual abuse was significantly higher among drug-dependent women than among alcohol-dependent women, who, in turn, had a higher frequency of sexual abuse than those women in the depression and control groups. These findings agree the results of Arellano (1996) and Swift, Copeland, and Hall (1996). Among men, the histories of physical abuse and neglect (emotional or physical) were more prevalent among the depression and alcohol- or other drug-dependent groups than in the control group. Few data in the literature have analyzed men in regards to abuse and neglect, which makes the comparison difficult.

In all of the groups of patients in the present study, the frequencies of sexual and emotional abuse were significantly higher among women than among men in the same group, corroborating data reported in the literature (Galaif et al., 2001; Zlotnick et al., 2001). Similar results were found in studies carried out with the general population (Bendixen et al., 1994).

In a recent qualitative study, Ambrogne (2007) reported an important link among substance abuse, depression, and childhood abuse. The author interviewed 13 women and reported that the depressive symptoms preceded substance abuse. Most of the women reported family environments characterized by parental alcohol and drug dependence, traumatic loss of a parent due to divorce, suicide, death, or loss of parental custody, and a history of physical, mental, and/or sexual abuse (77%). Most of the women blamed themselves, believing that their own inadequacies perpetuated abuse and loss. The author concluded that for clients with depressive symptoms and substance use disorder, treatment goals, interventions, and aftercare must address both the substance use and the psychiatric condition.

Similarly, Hyman et al. (2006) examined associations between the onset, escalation, and severity of substance use in cocaine-dependent adults and the types of childhood maltreatment. They reported that in men, emotional abuse was associated with a younger age at first alcohol use and a greater severity of substance abuse. In women, sexual abuse, emotional abuse, and overall maltreatment were associated with a younger age at first alcohol use, and emotional abuse, emotional neglect, and overall maltreatment were associated with a greater severity of substance abuse. They also studied the age at first alcohol use and concluded that it predicted the age at first cocaine use in both genders. All associations were stronger in women. Their findings, as well as those reported in the present study, suggest that early intervention for childhood victims, especially females, may delay or prevent the early onset of alcohol use and reduce the risk for a more severe course of addiction.

Potential limitations of this study

Some limitations in our study must be mentioned. People more severely traumatized by histories of childhood abuse and neglect might have opted not to participate in the study in order to keep from reviving painful memories, which might have caused an underestimation of the results obtained. In addition, the cross-sectional design of this study does not allow for the causality of the connection between histories of childhood abuse and neglect and the later development of a condition of depression or dependence on alcohol or drugs. However, in a recent study, Dom, Wilde, Hulstijn, and Sabbe (2007) concluded that not only is a history of childhood traumatic experiences associated with a higher substance abuse and related problem severity in women, but also that the childhood traumatic experiences are highly prevalent within clinical samples with a history of early onset alcohol-dependent patients compared with late onset patients.

Subjects who reported a single form of childhood trauma have been more likely to report other ones (Dong et al., 2004); therefore, it is important for researchers and clinicians who work with children and adults (particularly substance abusers) to investigate this co-occurrence. Substantial evidence from recent literature suggests that the effects of various forms of childhood trauma are cumulative (De Bellis et al., 2001; Dong et al., 2004; Liebschutz et al., 2002). These studies have demonstrated that the long-term effects of childhood traumas could be a result of not only sexual abuse (the most studied)

but also emotional and physical abuse and neglect. Given that evidence, we included a measure of cumulative childhood trauma as a measure of risk for the outcomes studied. Because the sample sizes of this study are relatively small, the confidence intervals in the analysis were very big, which makes the precision of the estimates of these cumulative traumas relatively imprecise.

In spite of these limitations, this study has made some methodological progress in relation to previous investigations. We used the same standardized instrument in the collection of histories of abuse and neglect in a sample of drug- and alcohol-dependent patients and in patients with symptoms of depression. In addition, we analyzed different types of abuse other than only physical or sexual. We included a control group of patients without psychiatric diagnosis of substance abuse or depression in order to evaluate the frequency of childhood traumas in a sample of the population that uses the same health service as the substance abusers and depressed patients. This study also evaluated both men and women in all of the groups, which is not often found in the literature since most of the studies on the history of abuse have only evaluated women.

This was the first study on childhood traumas carried out in Brazil using clinical samples that simultaneously relates childhood traumas to psychiatric disorders and substance use. Considering the paucity of this kind of data and analyses with Latin American population, its contribution to the literature can be significant.

Conclusion

Childhood traumas are frequently not included in the diagnostic process of substance abusers or substance-dependent patients. In this study, although many patients had been under treatment for more than two years, most of the victims of childhood sexual abuse had never talked to their psychiatrists about the traumatic experience. Patients must be asked about those experiences; otherwise, it is likely that they will not mention them during the treatment. The lack of an adequate investigation of a history of childhood trauma has been associated with some failures in and no adherence to the treatment for drug or alcohol dependence (Arellano, 1996).

The presence of a history of emotional and physical abuse in childhood or adolescence seems to be more prevalent than the history of sexual abuse among the patients under treatment for depression or for alcohol or other drugs dependence. The drug- and alcohol-dependent patients seem to present a higher frequency of emotional, physical, and sexual abuse than the patients with depression, who also present a higher frequency of such abuses than the patients in the control group.

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