

# Self-reported Child Sexual Abuse, Physical Abuse, and Parental History of Drug Misuse in Opioid Dependence Syndrome

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## Abstract

### Objective:

Childhood sexual abuse is common among patients with opioid dependence syndrome. The aim of this study was to find its prevalence and the relationship to the severity of dependence on opioid in patients attending the outpatient clinic of drug treatment service.

### Methods:

A set of scales were incorporated in semistructured interview: The Maudsley Addiction Profile; The Severity of Dependence Scale (SDS); Leeds Dependence Questionnaire (LDQ); Impact of Events Scale; Courtauld Emotional Control Scale; and the Psychosis Screening Questionnaire. Life events were measured using a modification of earlier life events list for young people. One hundred twenty patients with opioid dependence syndrome and 100 controls were interviewed.

### Results:

The reported sexual abuses were 32 (21 subjects and 11 controls) with no significant differences. Nevertheless, there was a significant difference in parents using drug/alcohol ( $P = 0.001$ ) and physical abuse ( $P = 0.001$ ). There was a significant association between the severity of dependence and parent using drugs (SDS  $r = 0.245$ ,  $P = 0.007$ ; LDQ  $r = 0.285$ ,  $P = 0.002$ ); physical abuse (SDS  $r = 0.306$ ,  $P = 0.001$ ; LDQ  $r = 0.231$ ,  $P = 0.011$ ); and sexual abuse (SDS  $r = 0.185$ ,  $P = 0.043$ ; LDQ  $r = 0.180$ ,  $P = 0.049$ ). Childhood sexual abuse was the only predictor for rape after the age of 18 years.

### Conclusions:

The findings offer important implications for ways in which health care practitioners can support this group of patients; assessing patient's childhood history of child sexual abuse. A well-designed intervention targeting both opioid dependence and child sexual abuse may help to improve the outcomes of this group of patients.

**Key Words:** childhood sexual abuse, opioid dependence, parental use of drugs or alcohol

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A high frequency of childhood sexual abuse has often been reported in adult psychiatric patients. Research from clinical population has shown high levels of child sexual abuse in patients with serious mental illness.<sup>1–3</sup> General population studies suggest that 13% to 17% of women and 2.5% to 5% of men report having suffered childhood sexual abuse. Higher rates of childhood sexual abuse are reported by adolescents and adults with a psychiatric diagnosis and range from 6% to 50%.<sup>4–6</sup> Rates of physical abuse appear similar, with women more likely to have experienced sexual abuse and men more likely to report a history of physical abuse.<sup>5</sup>

Women with a history of childhood sexual abuse also have a significantly increased risk of subsequently occurring substance abuse disorders,<sup>7</sup> conduct disorder,<sup>7</sup> eating disorders,<sup>8</sup> borderline personality disorder,<sup>9</sup> somatic symptoms (such as irritable bowel syndrome),<sup>7</sup> rape after 18 years of age,<sup>7</sup> and divorce.<sup>7</sup> Data from the National Comorbidity Survey demonstrate a 2- to 4-fold increase in suicide attempts among women who were sexually abused as children; rates of suicide attempts in men with a history of childhood sexual abuse are 4 to 11 times higher than those without a history of childhood sexual abuse.<sup>10</sup>

There is evidence of specific association of child sexual abuse with substance misuse.<sup>11</sup> Bear,<sup>12</sup> in a carefully

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controlled community study, found that 17% of the victimized women had symptoms of alcohol abuse, and 27% abused at least one type of drug. Bear<sup>12</sup> noted that 35% of the women with incestuous fathers in her clinical sample abused drugs and alcohol. The relationship between past sexual abuse and subsequent substance use particularly opiate use remains underresearched. Bear<sup>12</sup> suggest that many incest survivors have never learned appropriate ways of dealing with their anger, and frequently turn it in on themselves. This leads to self-mutilation, alcohol and drug abuse, and suicidal attempts. They refer also to the use of substance as means of blocking out memories. Anger and hostility can be used as a protective shield to stop others from getting too close. Several studies have supported those histories of childhood physical and/or sexual abuse particularly among women with current substance abuse, ranging from 32% to 66%.<sup>13-15</sup>

Some studies suggest that substance use may act as self-management of the psychological effects arising from abuse.<sup>16,17</sup> Stewart et al<sup>18</sup> propose that individuals will often choose and use drugs, which manage specific effects and consequences of abuse (such as intrusive recollections, flashbacks, nightmare, avoidance, numbing, or hypervigilance). Opiate, alcohol, and inhalant misuse have all been identified with this population and substance may be used to counteract the effect of poor self-esteem.<sup>19</sup>

The aim of this study was to find the prevalence of child sexual and physical abuse in opioid dependence patients with parental history of illicit drug misuse and the relationship to the severity of dependence in patients attending the outpatient clinic of drug treatment service.

## METHODS

### Participants and Procedure

This paper is part of the study of impact of life events on the profile of opioid dependence syndrome. Participants were recruited from outpatient attendees at a large urban center for

addiction treatment in Birmingham, UK. The center includes outpatient service and 16-bedded inpatient unit offering outpatient and inpatient assessment and detoxification for alcohol and other substances. The centre is a tertiary service—referrals need to be made through community alcohol teams, community drug teams, or general practitioners.

Patients aged between 21 and 52 years, with an ICD-10<sup>20</sup> diagnosis of opioid dependence syndrome, who were dependent on heroin or were being prescribed methadone, were included in the study. A total sample of 220 consecutive attendees at the clinic was interviewed. The sample included 120 patients and 100 controls of friends or family members. Patients were excluded from the study if they had any of the following conditions: history of psychotic disorder, head injury, or alcohol dependence syndrome. These exclusion criteria were used to reduce bias in recall negative events in childhood. All eligible subjects (based on self-reports of drug use) were then subjected to a urinalysis for psychoactive substances to confirm their use of heroin or methadone and to exclude concurrent use of other psychoactive substances. Two patients had history of psychotic disorders, 12 gave a history of alcohol dependence, and 13 refused to participate in the study. All of these patients were excluded and a final number of 120 patients and 100 controls participated in the study. The interviews were conducted in quiet, comfortable settings and each interview lasted about an hour. The nature and scope of the study was discussed with each patient and written informed consent was obtained from all patients before the interview. The Local Ethics Committee approved this study.

### Measures

Data were collected by way of semistructured interview. A pre-designed data sheet was used to extract sociodemographic information, and detailed clinical and drug use histories from patients. In addition, the following measures were contained in the data sheet.

**The Maudsley Addiction Profile (MAP)<sup>21</sup>**

The MAP is a brief, interview-administered questionnaire for treatment outcome of research applications: it measures problems in 4 domains: substance use, health risk behavior, physical and psychological health, and personal social functioning.

**The Severity of Dependence Scale (SDS)<sup>22</sup>**

The SDS was devised to provide a short, easy to administered scale, which can be used to measure the degree of dependence experienced by users of different types of drugs. The SDS contains 5 items, all of which are explicitly concerned with psychological components of dependence. These items are specifically concerned with impaired control over drug taking and with pre-occupation and anxieties about drug use. The SDS score is related to behavioral patterns of drug taking that are, in themselves, indicators of dependence, such as dose, frequency of use, duration of use, daily use and degree of contact with other drug users.

**Leeds Dependence Questionnaire (LDQ)<sup>23</sup>**

The LDQ is a 10-item, self-completion questionnaire designed to measure dependence upon a variety of substances. This questionnaire, together with the SDS, helped to determine the level of severity of opiate dependence in the patient group.

**Life Events Checklist**

This was measured using an adaptation of an earlier life events list for young people.<sup>24</sup> A total of 28 mainly adverse events and important changes were included in the final checklist. The patient was asked to indicate their exact age when the event occurred. At the end of the checklist there was an open-ended question for events not mentioned in the list. To make event description more precise, some questions were asked for each event: (1) How old were you when that happened? (2) Where were you living? (3) How long

did the problem go on for? (4) Did you ever feel you were responsible for bringing it about? If the patient rated >1 life event, he was asked to identify the most stressful event or events. The areas of self-reported history of sexual/physical abuse and parental drug use in childhood (before age 16) were also included in the check list.

**Courtauld Emotional Control Scale (CECS)<sup>25</sup>**

This questionnaire measured emotional control by evaluating the extent to which individuals reported controlling anger, anxiety, and depressed mood. Using this scale helped assess the possibility of lack of emotional control as a vulnerability factor to substance misuse.

**Impact of Events Scale (IES)<sup>26</sup>**

The IES is a scale of current subjective distress, related to a specific event. It is based on a list of items composed of commonly reported experiences of intrusion and avoidance. This widely used self-report measure of subjective distress after trauma provides an index of intrusive experiences (especially flashbacks and nightmares), avoidance reactions (in the face of reminders of the trauma), and autonomic hyperarousal (eg, as indicated by an exaggerated acoustic startle response). Subscale scores and total scores can be obtained based on the original scoring scheme of Horowitz et al.<sup>26</sup>

**The Psychosis Screening Questionnaire (PSQ)<sup>27</sup>**

The PSQ is a generic interview schedule to screen for psychotic conditions. Subjects who had a positive score on any of the 8 psychotic symptoms were classified as having cases of psychosis and were excluded from the study.

The nature and scope of the study was discussed with each patient and written informed consent was obtained from all patients before the interview. The Local Ethics Committee approved this study.

### Statistical Analysis

Analyses were performed using the Statistical Package for Social Sciences (SPSS, version 15). Descriptive statistics were used to summarize sociodemographic and substance use characteristics of the sample. In analyzing the difference between 2 conditions, *t* test was used in continuous data and  $\chi^2$  test was used in categorical data. In order to assess whether severity of dependence is related to sexual abuse, physical abuse, or parents using drugs/alcohol the Pearson correlation coefficient was used.

Logistic regression analysis was carried out to determine predictors of rape in adulthood. The variables chosen were those significant in the bivariate analysis and included sexual abuse, physical abuse, and parents using drugs.

## RESULTS

### Demographic and Drug Use Characteristics

The mean age of the patients group was 33.3 years, SD = 8.8 (20 to 65 y) versus 36.5 years, SD = 9.5 (20 to 54 y) in control group with a significant difference between the 2 groups ( $t = -2.463$ ,  $df = 218$ ,  $P = 0.015$ ). The majority of the sample were white British (80.8%), unemployed (69.2%), and were male (75%).

Ninety-four participants (78.3%) were heroin-positive in their urine screening. Thirty-nine patients (32.5%) were new referrals and had not been seen in the clinic before. Fifty-five (67.9%) of the methadone patients were using heroin on top of their prescribed methadone during the 30 days before the interview. The mean severity

of dependence as measured by both the SDS and LDQ, indicate severe levels of dependence according to the authors of each scale.

### Exposure to Abuse

The number of sexual abuses was 32 (21 subjects and 11 controls) with no significant differences. However, there were significant difference in parents using drug/alcohol ( $P = 0.000$ ) and physical abuse ( $P = 0.000$ ; Table 1).

Two measures were used in assessing the level of dependency on opioid, SDS and LDQ. There was a very high significant correlation between the 2 scales ( $r = 0.789$ ,  $P = 0.000$ ).

There was a significant association between the severity of dependence and parent using drugs (SDS  $r = 0.245$ ,  $P = 0.007$ ; LDQ  $r = 0.285$ ,  $P = 0.002$ ); physical abuse (SDS  $r = 0.306$ ,  $P = 0.001$ ; LDQ  $r = 0.231$ ,  $P = 0.011$ ); and sexual abuse (SDS  $r = 0.185$ ,  $P = 0.043$ ; LDQ  $r = 0.180$ ,  $P = 0.049$ ; Table 2).

A  $\chi^2$  test showed that sexual abuse was significant to females ( $\chi^2 = 19.536$ ,  $df = 1$ ,  $P = 0.01$ ) and physical abuse was significant to males ( $\chi^2 = 6.578$ ,  $df = 1$ ,  $P = 0.001$ ). In addition, a  $\chi^2$  test showed that rape after the age of 18 years (8 subjects, 3.6%; 6 patients, 5%; and 2 controls, 2%) was statistically significant with sexual abuse ( $\chi^2 = 24.41$ ,  $df = 1$ ,  $P = 0.001$ ); physical abuse ( $\chi^2 = 14.21$ ,  $df = 1$ ,  $P = 0.001$ ); and parents using drugs ( $\chi^2 = 6.53$ ,  $df = 1$ ,  $P = 0.011$ ).

### Predictors of Opioid Dependence Syndrome and Its Severity

A logistic regression analysis was performed with type of group as the dependent variable. A total of 220 cases were analyzed and the full model was significantly reliable ( $\chi^2 = 241.804$ ,

TABLE 1. Adverse Life Events in Subjects and Controls

Life Events	N (%)		$\chi^2$	P
	Subjects	Controls		
Sexual abuse	21 (17.5)	11 (11)	1.85	0.17
Physical abuse	32 (26.7)	15 (15)	4.42	0.04
Parents using drug/alcohol	26 (21.7)	11 (11)	4.44	0.04

**TABLE 2.** Correlation of SDS on Opiate and Significant Life Events in Patients Group

	SDS		LDQ	
	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>
Parent used drug/alcohol	0.245	0.007	0.285	0.002
Physical abuse	0.306	0.001	0.231	0.011
Sexual abuse	0.185	0.043	0.180	0.049

LDQ indicates Leeds Dependence Questionnaire; *P*, significant (2-tailed); *r*, Pearson correlation; SDS, Severity of Dependence.

$P < 0.001$ ). This model accounted for between 55.9% and 86.5% of the variance in opiate dependence diagnosis, with 94.0% of the nonopiate dependence successfully predicted. 95.8% of the predictions for opiate diagnoses were accurate. Overall 95.0% of the predictions were accurate. Physical abuse was a significant predictor ( $P = 0.014$ ) with 95% confidence intervals. In addition, a multiple regression analysis was performed with total SDS and LQD scores as the dependent variable. Using the enter method, a significant model emerged ( $F = 19.598$ ,  $P < 0.001$ ). Adjusted  $R^2 = 0.847$ . Parents using drugs was marginally significant ( $P = 0.051$ ) as a predictor of the severity of dependence on opiod.

Furthermore, another regression analysis was performed with rape in adulthood (occurred in 8 individuals) as dependent variable and the sexual abuse, physical abuse, and parents using drugs as independent variables. Only sexual abuse was significant ( $P = 0.014$ ; odds ratio = 9.9; 95% confidence interval, 1.596-61.515).

## DISCUSSION

The characteristics of the child, those of the parent, and those of the unique relationship that exists between them will affect the future behavior of the child. A number of authors have researched the observable behaviors that express parental styles between parent and offspring.<sup>28,29</sup> The impact of parenting styles on childhood represents a vast field of research, including the area of addiction and has produced a great number of studies.

Research into affective disorders has increasingly explored the role of past experiences, particularly those in childhood and adolescence. Adverse experiences such as marked indifference from a parent, or physical or sexual abuse, seem to be important risk factors.<sup>30,31</sup> Research also suggests that early experience is important in addictive disorders.<sup>32-36</sup> Evidence of several studies<sup>11,12</sup> found that 17% of the victimized women had symptoms of alcohol abuse, and 27% abused at least 1 type of drug. In addition, there were 35% of the women with incestuous fathers who abused drugs and alcohol. Our results are consistent with these results wherein our study reported 17.5% of patients as having been sexually abused versus 11% of the control group with significant difference in frequency between the 2 groups ( $\chi^2 = 5.18$ ;  $P = 0.02$ ). The relationship between past sexual abuse and subsequent substance use particularly opiates use remains underresearched. Hall and Lloyed suggest that many incest survivors have never learned appropriate ways of dealing with their anger, and frequently turn it in on themselves.<sup>12</sup> This leads to self-mutilation, alcohol and drug abuse, and suicidal attempts. They refer also to the use of substance as means of blocking out memories. Anger and hostility can be used as a protective shield to stop others from getting too close. In our sample it could be through chaotic opiates use that patients keep others away through aggressive and unattractive behavior. As opiates can act as an emotional anesthetic, it seems that opiates help in distancing them from the pain of the past, protecting them from the daily triggers of childhood

memories. It seems that opiates is very effective in suppressing memories and maintaining the secrets. It was found that childhood abuse is related to the development of high levels of dissociative symptoms including amnesia for abuse memories.<sup>36</sup> In our study it could be suggested that using opiates is a way of strong support for this memory amnesia. This was supported by<sup>37-39</sup> findings of the high rate of self-reported amnesia for childhood sexual abuse (19% to 62%) in clinical population being treated for trauma-related conditions. Also this will be consistent with Coons's<sup>40</sup> view that a degree of denial of some aspect, if not of the fact, of the abuse is almost universal. Faced with denial of the offender and disbelief of the carers, abused children sometimes retract their previous accounts in an attempt to deny the unbearable reality. This form of dissociation may become a lifelong pattern.<sup>41</sup>

The significant association between child sexual abuse and suppression of anger was highly significant which is consistent with several works. Suppression of anger and directing it toward the self plus using drugs become the means to being able to cope. They also believe that their lives would be even worse without the substance. This knowledge and conflict can be very distressing and in itself leads to further use as a way of dealing with the stress of this insight. If they cease drug use, they are likely to feel depressed, unable to cope, vulnerable, and abnormal. This, along with external pressures, leads to a desire or craving to use again.<sup>12</sup>

### Children of Parents With Substance Use Disorders

Drug use disorders show strong familial transmission.<sup>42</sup> Twin studies have consistently demonstrated a substantial genetic component to illicit drug abuse and dependence.<sup>43</sup> An obvious risk factor for a genetically influenced disorder is having a parent with the disorder. Although strong environmental influences have also been implicated by twin research, research in adoptive samples has generally found that being reared by an alcoholic parent does not significantly increase the risk for alcoholism in adopted offspring.<sup>44,45</sup>

Three reasons have been suggested for strong familial influence on the adolescent's involvement in substance abuse. First, the adolescent may be modeling the behavior of a family member. Second, in family environment one learns what is and what is not socially appropriate, for example, if alcohol or other drugs are used on a regular basis in a family, the children receive a message that such a behavior is "normal" and acceptable. Finally, a family in which one or more adults are substance abusers is likely to produce emotional and/or psychological pain to the adolescent, who may turn to substance abuse as an escape mechanism.<sup>46</sup> Our sample showed significant parental substance misuse compared with control group. Also there was positive association between parental substance misuse and severity of dependence in our patient. This is consistent with other study suggesting a relationship between parental drug use and children drug dependence. The reason for this association is beyond the design of this study. Other explanations include: that there is a common genetic factor that may underlie both personality traits (behavioral disinhibition, ie, novelty-seeking, impulsivity, negative emotionality) and drug misuse.<sup>47-49</sup> Other possibility is that children of parents with substance use disorders have greater liability for mental disorders (conduct disorder, attention deficit hyperactivity disorder, depressive disorder, and anxiety disorder) other than substance abuse<sup>50,51</sup> which expose them to more chances of negative life events and hence substance misuse.

### Limitations

The study had certain limitations in that the interviewer was not blind to the case status of the subjects. In addition, low sample size may result in low power of the study.

### CONCLUSIONS

The data presented indicate that a significant group of opioid-dependent patients experience history of childhood sexual abuse. These findings offer

important implications for ways in which health care practitioners can support this group of patients; assessing patient's childhood history of child sexual abuse. A well-designed intervention targeting both opioid dependence and child sexual abuse may help to improve the outcomes of this group of patients.

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