The Relation Between Childhood Abuse and the Severity of Substance Abuse Disorder

Background: A number of studies have found revealing correlations between history of childhood abuse and increased severity of addiction among substance abusers. Many of those who have experienced abuse in childhood turn to alcohol or drugs to help them deal with emotional pain, among the myriad of other experienced symptoms.

Aim: To explore the relation between the childhood abuse and the severity of addiction highlighting ego function impairment if any.

Subjects & Methods: Forty one patients from a private psychiatric hospital admitted for recovery from substance abuse and fifty seven controls were interviewed using the Questionnaire for Childhood Abuse Experiences and the Egyptian Classification of Fahmy and El Sherbiny. In addition Bellack's Clinical Assessment of Ego Functions and Addiction Severity index (ASI) were further applied to the patients group.

Results: No significant correlation between history of childhood abuse as a whole and addiction severity was found. However, there were positive significant correlations between maternal E/P abuse and legal as well as employment problems and patients with history of sexual abuse were significantly more inclined to seek treatment. Also this study showed a significant positive correlations between E/P abuse (Whether paternal or maternal) and impairment of ego functions.

Conclusion: Childhood abuse may not be directly related to the severity of addiction; however it is positively correlated with ego function impairment and may indicate maladaptive family dynamic. Inquiring about early experiences of childhood abuse is an integral aspect in the assessment of a substance abuse patient in order to tailor an effective plan of management to each patient.

Keywords: Addiction Severity, Childhood Emotional Abuse, Childhood Sexual Abuse, Ego Function.

Abbreviations:
E/P: Emotional/ Psychological
ASI: Addiction Severity index

INTRODUCTION

Childhood abuse, both physical and sexual, has been the subject of increasing attention in the realm of psychiatric research. This is especially true in relation to drug abuse. Despite evidence suggesting that childhood physical and sexual abuse do not result in significant negative outcomes, (Rind, et al. 1998 and Bartholomew, et al. 2005), a large number of studies have shown that victims of childhood abuse, either males or females, suffer a high toll of problems, especially in the long-term. A number of studies have found revealing correlations between a history of abuse and increased rates of substance use (Charnaud and Griffiths, 2000; Rew, et al. 2001 and Putnam, 2003). With regard to the effect of childhood abuse across genders, female substance users, are evidently and predominantly more likely to report a history of abuse (Simpson and Miller, 2002 and Marsden, et al. 2000). According to a review by Swan, (1998) at Harvard Medical School in Boston, female drug abusers revealed much higher rates of a coexisting diagnosis of Posttraumatic Stress Disorder (PTSD), amongst which is child abuse trauma, than male drug abusers.

In an attempt to understand the psychopathology linking traumatic events and substance use problems in adulthood, it was found that many of those who have experienced child abuse, or other trauma turn to alcohol or drugs to help them deal with emotional pain, bad memories, poor sleep, guilt, anxiety or terror. (Rew, et al. 2001).

So, substance abuse may be considered an attempt of self-medication aiming at inducing a dissociative state (Khantzian, 1997), or can present an external channel to discharge painful internal states immediately (McDougall, 1989).

Westermeyer, et al. (2001) assessed the course and severity of substance related disorders against childhood physical abuse and they found that the addiction severity in patients with history of abuse was more severe on five out of six severity measures. Furthermore, Rosen, et al. (2002) found that drug abusers with a history of childhood abuse have more significant problems in their daily lives, coexisting
psychological problems, low self esteem, inability to trust others as well as a high sense of helplessness. Branstetter, et al. (2000) found that a history of abuse may predict increase in the experience of family-related problems which, according to Brems, et al. (2004), may result in substance use relapse.

Moreover, Ompad, et al. (2005) examined the relation between childhood sexual abuse and age of initiation of injection among injection drug users, and they found an earlier initiation in those with history of sexual abuse.

So, a deeper and clearer understanding of the consequences of child abuse would better enable researchers to more effectively tailor substance abuse treatment to adults with a history of child abuse (Swan, 1998), as individuals seeking treatment aspire for improvement in several areas of their lives, rather than mere substance use reduction (Branstetter, et al. 2000). Charnaud and Griffiths, (2000) stated that “The degree of trauma the patient has suffered can provide useful insight in predicting therapeutic needs and types of intervention required.”

SUBJECTS AND METHOD

This cross sectional descriptive study was conducted on 41 male patients having substance abuse disorder and 57 normal healthy controls matched for age, sex and social class. The patients were assessed during their stay at a private psychiatric hospital. It was conducted along three months from October to December 2008 on all patients admitted during that time following their detoxification stage of the treatment plan. Inclusion criteria included males whose age ranged from 18 to 45, admitted voluntarily to the hospital for treatment with a DSM-IV axis I diagnosis of substance related disorder (APA, 1994). Diagnosis was done by the researcher and a consultant psychiatrist. Since self rated scales were used, patients presenting with any psychotic symptoms (Whether as a comorbidity or substance induced) were excluded in order to guarantee a valid responses. Other exclusion criteria included patients not consenting to the research and patients with an impaired consciousness. The following tools were applied to the patients:

Questionnaire for Childhood Abuse Experiences (Mekhaimar and Abdel Razek, 2004): This is a valid and reliable questionnaire that was applied to probe experiences of childhood abuse. It divides childhood abuse into three categories: paternal, maternal and sexual. The paternal and maternal abuse experiences are further subdivided into physical and emotional/psychological abuse. The questionnaire was first conducted by the study researcher. Despite their previously identified positive child abuse history, addicts were inclined to deny such experiences. The questionnaire was therefore applied for each patient by his therapist to avoid the possibility of false negative results. All therapists/raters were trained by the author to conduct the questionnaire.

Addiction severity index (ASI) (McLellan, et al. 1992): This instrument is a self and therapist rated tool that is broadly utilized in substance abuse studies. It is useful in assessment of both clinical and adaptive functions of substance abusers. It helps in pinpointing specific repercussions of addiction on medical, employment, alcohol, drugs, legal, family, and psychiatric parameters. The Arabic version (Hanna, 1994) was applied.

Ego Functions Assessment (Bellak, 1973): Ego function is a complex concept of emotional and mental domains. It is based on psychoanalytic theory by ego psychologists. Twelve scales of functioning are indexed by this instrument, they include: reality testing, sense of judgment, sense of reality, regulation and control, object relation, thought processes, autonomous functioning, defensive functioning, stimulus barrier, adaptive regression, mastery incompetence and synthesis and integration. This tool was applied by two raters. The Arabic version (Sabry, 1998) was applied. All raters had a minimum experience of 3 years in case management.

The Egyptian Classification of Fahmy and El-Sherbini (Fahmy and El Sherbini, 1986): according to this tool, patients are classified very low, low, middle and high social classes. Classification is based on scoring of education of father, education and work of mother, income, crowding index and sanitation.

Statistical Analysis:

Data was entered into SPSS version 15 and methods of analysis were selected where appropriate. Accordingly Chi-Square test was used to compare the level of childhood abuse between the patients and the control groups. Pearson and Spearman test were conducted to demonstrate different correlations between the studied variables. Results were considered significant if they passed the P<0.05 level of significance.

RESULTS

The total number of patients was 41, all males, mean age was 27.5 (+4.8), 58.5% (n=24) of the sample of average education (Up to high school) while 41.5% (n=17) highly educated (University degree). With regard to marital status, 68.3% (n=12) of the sample were single, 23.3% (n=28) were married and only 2.4% (One patient) was divorced.

The total number of the controls was 57, the mean age was 23.5 (+6.1), 24.5% (n=14) of them were of average education, and 75.5% (n=43) were highly educated.
Concerning the marital status, 35% (n=20) were single, 36.8% (n=21) were married, 24.5% (n=14) were engaged and 3.5% (n=2) were separated.

There was no significant difference between both patients and controls as regards the social class (p=.04), 82.9% (n=34) of the patients and 77.1% (n=44) of the controls were of high class and 17.1% (n=7) of the patients and 22.9% (n=13) of the controls were of middle class according to the Egyptian Classification of Fahmy and El Sherbini.

No significant difference was found between patients and controls regarding the level of childhood abuse whether paternal (p=0.522), maternal (p=0.098) or sexual (p=0.079) (Table 1).

Table 1: Comparison of the degree of childhood abuse between the patients and the controls groups:

<table>
<thead>
<tr>
<th>Patients</th>
<th>Controls</th>
<th>t/P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Paternal</td>
<td>70.4</td>
<td>+4.25</td>
</tr>
<tr>
<td>Paternal</td>
<td>t=0.409</td>
<td></td>
</tr>
<tr>
<td>Maternal</td>
<td>69</td>
<td>+2.6</td>
</tr>
<tr>
<td>Maternal</td>
<td>t=2.889</td>
<td></td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>16</td>
<td>+1.3</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>t=3.085</td>
<td></td>
</tr>
</tbody>
</table>

No significant correlation was found between childhood abuse experiences overall and the different categories of the addiction severity index: health (p=0.222) employment (p=0.176) drugs and substances (p=0.387) legal problems (p=0.089) family history (p=0.788) social problems (p=0.752) and psychiatric problems (p=0.968) (Table 2).

Table 2: Correlation between Childhood Abuse (total score) and the Severity of Addiction:

<table>
<thead>
<tr>
<th>Childhood abuse</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0.197</td>
<td>0.222</td>
</tr>
<tr>
<td>Employment</td>
<td>-0.218</td>
<td>0.176</td>
</tr>
<tr>
<td>Drugs &amp; substances</td>
<td>-0.141</td>
<td>0.387</td>
</tr>
<tr>
<td>Legal problems</td>
<td>0.277</td>
<td>0.084</td>
</tr>
<tr>
<td>Family History</td>
<td>0.044</td>
<td>0.788</td>
</tr>
<tr>
<td>Social problems</td>
<td>-0.052</td>
<td>0.751</td>
</tr>
<tr>
<td>Psychiatric problems</td>
<td>0.007</td>
<td>0.968</td>
</tr>
</tbody>
</table>

In an attempt to find any significant correlation, the different childhood abuse experiences were examined separately. Again, no significant correlations were found between paternal child abuse experiences, whether emotional/psychological or physical, and the different items of the addiction severity index scale (Table 3).

Concerning maternal child abuse, significant positive correlations were found between emotional/psychological maternal abuse and legal (p=0.018) as well as employment problems (p=0.04) that patients suffered later in their lives (Table 3).

As regards sexual abuse, no correlation was detected between this kind of abuse and the addiction severity (Table 3).

Table 3: Correlation between Different Childhood Abuse Experiences (Paternal–Maternal–Sexual) and the Severity of Addiction:

<table>
<thead>
<tr>
<th>Paternal Abuse</th>
<th>E/P Abuse</th>
<th>Physical Abuse</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0.153</td>
<td>0.543</td>
<td>0.090</td>
<td>0.198</td>
</tr>
<tr>
<td>Employment</td>
<td>-0.127</td>
<td>-0.155</td>
<td>-0.474</td>
<td>-0.322</td>
</tr>
<tr>
<td>Drugs &amp; substances</td>
<td>-0.114</td>
<td>-0.155</td>
<td>-0.474</td>
<td>-0.204</td>
</tr>
<tr>
<td>Legal problems</td>
<td>0.158</td>
<td>-0.137</td>
<td>0.392</td>
<td>0.368</td>
</tr>
<tr>
<td>Family History</td>
<td>0.130</td>
<td>0.185</td>
<td>0.246</td>
<td>-0.159</td>
</tr>
<tr>
<td>Social problems</td>
<td>-0.016</td>
<td>0.124</td>
<td>0.440</td>
<td>-0.174</td>
</tr>
<tr>
<td>Psychiatric problems</td>
<td>0.75</td>
<td>0.640</td>
<td>0.127</td>
<td>0.428</td>
</tr>
</tbody>
</table>

In an effort to find any other correlations, emotional/psychological and physical abuse whether paternal and maternal, as well as sexual abuse were examined separately in relation to some specific sub-items in the ASI as the age of onset of substance abuse, the number of times of admission into a psychiatric hospital, the number of times of seeking psychiatric treatment and the number of times of overdoses. Apart from a significant positive correlation between sexual abuse and the number of times psychiatric treatment was sought (p=0.029), no other correlations were found between any of these variables (Table 4).
The Relation Between Childhood Abuse and the Severity of Substance Abuse Disorder

Table 4: Correlation between Different Childhood Abuse Experiences and Specific Subitems in the A.S.I:

<table>
<thead>
<tr>
<th></th>
<th>E/P.A (Father)</th>
<th>P.A (Father)</th>
<th>E/P.A (Mother)</th>
<th>P.A (Mother)</th>
<th>Sexual abuse</th>
<th>All items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of onset of abuse</td>
<td>r</td>
<td>p</td>
<td>r</td>
<td>p</td>
<td>r</td>
<td>p</td>
</tr>
<tr>
<td>Admission n.</td>
<td>-0.213</td>
<td>0.182</td>
<td>-0.73</td>
<td>0.652</td>
<td>-0.238</td>
<td>0.133</td>
</tr>
<tr>
<td>Treatment n.</td>
<td>0.052</td>
<td>0.745</td>
<td>0.015</td>
<td>0.927</td>
<td>-0.216</td>
<td>0.175</td>
</tr>
<tr>
<td>Overdose n.</td>
<td>-0.002</td>
<td>0.992</td>
<td>0.118</td>
<td>0.416</td>
<td>-0.151</td>
<td>0.344</td>
</tr>
</tbody>
</table>

n= number of times
r= Pearson Correlation
p= Significance
A.S.I: addiction severity index
E/P.A: emotional/psychological abuse
PA: Physical abuse

For ego functions, a negative correlation was found between emotional/psychological abuse, whether paternal (p=0.037) or maternal (p=0.042), and ego functions (Table 5).

Table 5: Correlation between the Ego Functions and the Different Childhood Abuse Experiences:

<table>
<thead>
<tr>
<th></th>
<th>EG Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E/P.A (Father)</td>
</tr>
<tr>
<td>Age of onset of abuse</td>
<td>r</td>
</tr>
<tr>
<td>Admission n.</td>
<td>0.135</td>
</tr>
<tr>
<td>Treatment n.</td>
<td>-0.327</td>
</tr>
<tr>
<td>Overdose n.</td>
<td>0.069</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>-0.340</td>
</tr>
<tr>
<td>Total score</td>
<td>-0.261</td>
</tr>
</tbody>
</table>

(*)= Statistically significant.
r= Pearson Correlation.
p= Significance.
P.A= Physical abuse.
E/P.A= Emotional/psychological abuse.

Likewise, a negative correlation was found between ego functions and the pattern of drug and substance abuse (p=0.0338) as well as the psychiatric problems (p=0.044) (Table 6).

Table 6: Correlation between the Ego Functions and the Addiction Severity:

<table>
<thead>
<tr>
<th></th>
<th>EG Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health</td>
</tr>
<tr>
<td>Age of onset of abuse</td>
<td>-0.133</td>
</tr>
<tr>
<td>n. Admission</td>
<td>0.015</td>
</tr>
<tr>
<td>n. Treatment</td>
<td>-0.533</td>
</tr>
<tr>
<td>n. Overdose</td>
<td>0.190</td>
</tr>
<tr>
<td>n= number of times</td>
<td>0.054</td>
</tr>
</tbody>
</table>

(*)= Statistically significant.
r= Pearson Correlation.
p= Significance.

DISCUSSION

The results in this study failed to support the impact of childhood abuse experiences on addiction severity (Table 2). These findings fail to replicate those of many other studies which found that the presence of history of abuse during childhood may result in a more morbid course of substance abuse later in adulthood (Branstetter, et al. 2000; Westermeyer, et al. 2001; Rosen, et al. 2002 and Brems, et al. 2004). However, it may agree with an Egyptian study which found that the rate of relapse among substance abusers was not affected by parental attitudes (El Madbouly, 2008).

The absence of a clear correlation between childhood abuse and addiction severity could be an indication that abuse alone is not the factor that raises addiction severity levels, but rather the family context. Fergusson, et al. (2008) suggested that much of the association between childhood physical abuse and later mental health reflects the general family context in which childhood physical abuse occurs also, this is in line with Swan, (1998) who stated that “Not all cases of child abuse produce subsequent dysfunction, factors that tend to increase dysfunction, such as drug abuse include severity and nature of the abuse and severity
of injury, a younger victim, lack of appropriate coping skills, prior psychological disorder, family dysfunction, and lack of social support following the abuse”.

On the other hand, the level of childhood abuse found among substance abusers was found to be mild, and there were no significant differences between patients and controls regarding childhood abuse levels whether paternal, maternal or sexual (Table 1). However, such finding may be either real or attributable to subject’s denial, cultural influences or memory failures. Application of projective tests in future studies may help in better probing and understanding childhood abuse experiences.

No correlation was found between sexual abuse and addiction severity. Perhaps if other variables had been examined, such as the age at which sexual abuse had occurred, new correlations may have been found such as reported by Jarvis, et al. (1998) who found that the influence of childhood sexual abuse on substance abuse is crucial during adolescence. Moreover, this study was conducted on an all-male sample. Had females been included, it may have yielded different outcomes as a large body of research has found both the incidence of childhood abuse and its impact on addiction severity to be higher among female substance abusers than amongst their male counterparts. (Marsden, et al. 2000). A similar comparative study based on gender differences may be of interest in revealing the effect of childhood abuse on the severity of addiction among female abusers.

However, the examination of sexual abuse and the sub-items of the Addiction Severity Index (ASI) revealed a significant correlation between sexual abuse and the number of times psychiatric help was sought. This may indicate deep internal agony and a need for external help amongst substance abusers. Psychiatric help may also be sought with the aim of overcoming a crisis and alleviating inner pain and painful memories rather than treating substance abuse. Further research is needed in order to determine if the high rate of seeking treatment indicates negative aspects (Recidivism, helplessness) or positive ones (Good insight, refusal of the victim role). This is especially significant in light of the large number of studies that have confirmed that sexual abuse has far more detrimental effects than emotional and physical abuse on addiction severity (Putnam, 2003).

This study found a significant correlation between maternal emotional/psychological abuse and legal and employment problems in adulthood among substance abusers. However, this is not to say that the influence is maternal-specific; it could also be associated with a lack of paternal influence due to the father’s absence as was the case with many of the cases in the study. With respect to legal problems, they may indicate impulsivity, a result or manifestation of impaired ego function, the fact that was proved by Juni and Stack, (2005). Falzon, (2007) stated that it is very common for emotional abuse victims to feel worthless, as well as unsafe and untrusting of others. He viewed that the effects of the pain and anger resulting from emotional abuse can induce more self harm and self-destructive behavior.

Ego function integrity was found to be undermined in patients having experienced emotional/psychological abuse, whether paternal or maternal. This may play a role in the psychopathogenesis of addiction, especially the inability to verbalize and fantasize which, according to Krystal, (1988), represent two of the core dynamics of substance abuse, hence affecting addiction severity indirectly.

The pain resulting from emotional abuse can have such a damaging effect on one’s life for years leading to impaired ego function (Falzon, 2007). This may be aligned with the significant correlation found between impaired ego functions, earlier age of onset, increased number of admissions and increased number of overdoses which may be considered as risk-taking behavior or even hidden suicide.

So, inquiring about early experiences of childhood abuse is an integral aspect in the assessment of a substance abuse patient in order to tailor an effective plan of management to each patient separately. This inquiry should be sensitive to cultural tendencies which may minimize or deny parental abuse. Branstetter, et al. (2000) view that the therapist and client should discuss the possible effects of substance abuse problems on trauma-related problems, including sleep, anger, anxiety, depression, and work or relationship difficulties. Rew, et al. (2001) proposed an integrated and a coordinated approach to all interventions instead of separate meetings devoted only to traumatized or to substance problems.

Finally, the impact of abuse during childhood is neither fully understood nor proven in spite of the many studies that have explored this relationship in substance abuse patients and the typology of addiction needs more study and further investigation. Future studies with larger number and more diverse sample are recommended. Better understanding of the patient’s situation and a more accurate targeting of topics to be tackled during management would be of essential value in designing effective treatment.

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المالخص العربي

العلاقة بين الإساءة في مرحلة الطفولة وحدة سوء استخدام العقاقير

مصطفى الرخاوى
كلية الطب-جامعة القاهرة

أظهرت عدد من الدراسات وجود علاقة بين وجود تاريخ خبرات إساءة أثناء الطفولة وازدياد حدة الإدمان بين متعاطى العقاقير فضلا عن أن العديد من هؤلاء الذين تعرضوا لخبرات إساءة أثناء الطفولة لجأوا فيما بعد إلى الكحوليات والمخدرات لكي تساعدهم في التغلب على الألم النفسي الناتج عن مثل هذه الخبرات.

تهدف الدراسة إلى فحص العلاقة بين خبرات الإساءة أثناء الطفولة وحدة تعاطى العقاقير وإظهار أي إضطراب–إن وجد–في وظائف الأنا.

تم إجراء مقابلات معهم أثناء تواجدهم داخل مستشفى نفسي خاص للعلاج. وتم تطبيق الاختبارات التالية، اختبار بلاك لتقييم وظائف الأنا، وكذلك تم تطبيق مقياس شدة الإدمان ووضع خطة علاجية محددة من جانب الأب أو الأم.

وقد أظهرت الدراسة أن الإساءة في مرحلة الطفولة لم يكن لها علاقة مباشرة مع حدة الإدمان ولكن كان تأثيرها واضحا على وظائف الأنا، والتي يمكن أن يؤثر على مآل المرض بشكل غير مباشر، لذا هذه الخبرات يجب التأكيد على فحصها في المرضى المدمنين وبخاصة الإناث، كما يجب الالتفات إلى السياق الذي تمت فيه هذه الخبرات من حيث سن الطفل ورد الفعل الأسري وطبيعة البيئة الأسرية وما تمثله هذه الخبرات في الوقت الراهن بحيث يمكن الإفادة من ذلك في وضع خطة علاجية محددة وخاصة لكل مرض على حدة.

أما بالنسبة للعلاقة الضارة فهي تمثلت في 5 فرد وتم تطبيق استبيان خبرات الإساءة في مرحلة الطفولة عليهم.

أظهرت الدراسة أنه استثناء وجود ارتباط مباشر دال بين الإساءة النفسية من جانب الأب أو الأم وارتفاع معدل المشاكل القانونية والمهنية.