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Adverse childhood experiences in substance use disorder outpatients of a Lebanese addiction center

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ABSTRACT

Childhood adversities (CAs) are well reviewed in mental health and addiction research internationally. However, these variables have not been studied within the framework of addiction in the Middle East region. The present study reports the prevalence of Childhood Adversities in a sample of outpatients seeking treatment for Substance Use Disorder. We used the Adverse Childhood Experiences – International Questionnaire (ACE-IQ) to map out the prevalence of childhood adversities. The studied population was composed of a clinical outpatient sample that met criteria for substance use disorder ($N = 144$). Results indicated that almost all the sample reported having experienced at least 1 CA, whereby three quarters of the clinical sample reported experiencing 6 or more adversities. Childhood adversities are highly prevalent in a Lebanese substance use disorder population which raises the need for better screening strategies and more understanding of Adverse Childhood Experiences in this specific population

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1. Introduction

A myriad of research has firmly established the negative outcomes of Adverse Childhood Experiences (ACEs) and early Traumatic Events (TEs) on mental and physical health (Agorastos et al., 2014; Banducci, Hoffman, Lejuez, & Koenen, 2014; Douglas et al., 2010; Dunn et al., 2002; Gerra et al., 2014). CAs have also been linked to risky behaviors in adulthood such as increased risk of suicide attempt (Dube et al., 2001), parenteral drug use (Dube et al., 2003), post-traumatic stress disorder (Khoury, Tang, Bradley, Cubells, & Ressler, 2010), recurrent symptoms of anxiety and depression (Mersky, Topitzes, & Reynolds, 2013), and an array of other psychiatric disorders (Rytila-Manninen et al., 2014).

The earlier and more frequent the experiences of CAs are, the higher the risks are in adolescence and adulthood to resort to illicit drugs (Agorastos et al., 2014; Icick et al., 2013). CAs tend to be multiple (Somaini et al., 2011). When compared to individuals without CAs, those with a history of ACE and/or TE are more likely to have elevated risks of

developing SUD (Douglas et al., 2010), and that risk has a cumulative effect; higher numbers of adversities result in higher risks for developing SUD (Dube et al., 2003; Kendler et al., 2000). In this regard, ACEs and early TEs may be predisposing factors for the development of addictions, during and after stressful experiences in adulthood (Keyes et al., 2014).

The present study reports the prevalence of CAs in a sample of outpatients seeking treatment for SUD, in a Lebanese addiction treatment center.

2. Method

Ethics approval was received from the Lebanese University (LU) to conduct the study.

No funding was received for this research.

2.1. Participants

Participants were recruited from two branches of an addiction center (from Central Beirut and from its' Suburbs) called Skoun, Lebanese Addiction Center. All patients were approached ($N = 179$), however 25 of them refused to participate given the sensitive nature of the present topic (response rate 86%). Furthermore, 10 participants were dropped from the analysis after completing the survey because they were the only females in the sample. The final sample consisted of ($N = 144$) outpatients. Inclusion criteria for the clinical sample were (1) to be aged 18 or above, and (2) a diagnosis of *Substance Use Disorder* (SUD) according to DSM5 criteria.

2.2. Instruments

2.2.1. Childhood adversities

The international ACE questionnaire (ACE-IQ) was used to assess childhood adversities that participants were exposed to, or had experienced, before the age of 18. The ACE-IQ was developed by the Center for Disease Control and Prevention (CDCP), and the World Health Organization (WHO) in 2009, in order to facilitate standardization of ACE questionnaires, and cross-cultural comparisons across countries disregarding their levels of development (Almuneef, Qayad, Aleissa, & Albuhairan, 2014; World Health Organization, 2011). The ACE-IQ was translated to Arabic and back-translated to English, was adapted to the Arabic context, was used in a pilot study in Saudi Arabia by a team of Saudi Arabian researchers (Almuneef et al., 2014).

ACE-IQ is a 36-item self-report questionnaire that tackles eight domains of adversities, namely (1) marriage, (2) relationship with parents\guardians, (3) neglect, (4) family environment, (5) physical, emotional, and sexual abuse, (6) peer violence, (7) witnessing community violence, and (8) exposure to war\collective violence). However, seeing the aims of the present study, the section inquiring about marriage related information was not used.

The scoring system of the ACE-IQ is composed of two parts. The first is a binary (*yes/no*) scoring system for each of the items in the seven domains, and the second is a frequency, Likert scale scoring system (Almuneef et al., 2014). We used both scoring systems in this study.

2.2.2. Substance use disorder

Substance use disorder was assessed according to DSM5 criteria (American Psychiatric Association, 2013).

2.3. Procedures

Data collection took place in both branches of the addictions center, starting from the beginning of April 2016 until the end of July 2016. The sample was well debriefed about the study and participants were required to sign an informed consent, which explained their roles and their rights in this research. It has been made clear that refusal to participate in this study will not affect positively or negatively their treatment process at Skoun.

2.4. Analyses

Socio-demographic information and exposures to adversities are reported in terms of frequencies and percentages. All data was entered, managed, and analyzed using the Statistical Package for the Social Sciences (SPSS) version 20.

3. Results

3.1. Socio-demographic information of the present sample

The mean age of the total sample was 33.37. More than half were single (never married; 59.4%), less than half obtained or were completing a university degree (39.6%), and almost all were undergoing treatment for opioids (87.3%). More than half of the sample (57.3%) reported first using illicit substances before the age of 18 (see Table 1).

3.2. Prevalence of childhood adversities before age 18

Almost all the sample (98.1%) reported having experienced at least 1 CA, whereby the majority (74.3%) reported experiencing 6 or more CAs (tables 2 & 3). With regard to ACEs, the most common forms reported were neglect by guardians (14.8%), yelled at or humiliated by a more powerful household member (63%), being hit by a more powerful household member (47.2%) and being touched in a sexual way without consenting to it (21%).

Concerning TEs, the most common forms reported were being in a physical fight (83%), seeing someone being beaten up (83.1%) and being forced to leave home due to war-related events (44.8%).

4. Discussion & limitations

To date and to the best of our knowledge, only one study has assessed the total occurrences of CAs in Lebanon, in a report that surveyed a nationally representative sample (Itani, Haddad, Fayyad, Karam, & Karam, 2014). Their results estimated that 60% of the Lebanese population has experienced at least one CA before the age of 18, whereby TEs were more common than ACEs due to war-related events. However, little is known about the CAs experienced by clinical populations such as outpatients seeking treatment for SUD in Lebanon.

Table 1. Socio-demographic information of the present sample.

	Categories	Sample
Demographics		N (%)
Gender	Male	144 (100)
Age	Mean = 33.37 SD = 9.871	
	18–29	66 (47.1)
	30–39	46 (32.9)
	40–49	13 (9.3)
	50–59	12 (8.6)
	60–69	3 (2.1)
Civil Status	Married	31 (21.7)
	Divorced or separated	21 (14.7)
	Single, never married	85 (59.4)
	Widowed	1 (0.7)
	Other	4 (2.8)
	Refuse to answer	1 (0.7)
Maximum level of education	No formal schooling	5 (3.5)
	<Primary school	4 (2.8)
	Primary school	12 (8.3)
	Middle school	29 (20.1)
	High school	37 (25.7)
	University degree	57 (39.6)
Nationality	Lebanese	136 (94.4)
	Non-Lebanese	7 (4.9)
	Refuse to answer	1 (0.6)
Work Status	Government employee	3 (2.1)
	Private sector employee	56 (39.7)
	Self-employed	29 (20.6)
	Non-paid	1 (0.7)
	Student	6 (4.3)
	Unemployed (able)	44 (31.2)
	Unemployed (unable)	0 (0.0)
	Refuse to answer	2 (1.4)
Household average income	<300,000 L.L	17 (13.0)
	300,000–999,000 L.L	32 (24.4)
	1,000,000–1,499,000L.L	14 (10.7)
	1,500,000–1,999,000L.L	17 (13.0)
	2,000,000–4,999,000L.L	30 (22.9)
	>5,000,000 L.L	21 (16.0)
Substance being treated for	Opioids	117(87.3)
	Cocaine	9 (6.7)
	Cannabis	6 (4.5)
	Alcohol	2 (1.5)
Age of first illicit substance use	Mean=17.69 SD=4.251	
	Before age 18	82 (57.3)
	Between ages 18 - 28	55 (38.5)
	After age 29	6 (4.2)

Note: All participants met diagnostic criteria for SUD for *opioids, cocaine, cannabis, or alcohol*. Some percentages may not round up to a 100 because of missing data.

Table 2. Minimum Number of Exposures to Childhood Adversity.

Number of Adversities	N = 144
	N (%)
0	3(1.9)
1	3(1.9)
2	7(4.5)
3	5(3.2)
4	8(5.2)
5	13(8.4)
≥6	115(74.7)

Note: Percentages may not round up to a 100 because of missing data.

Table 3. Prevalence of adverse childhood experiences by domains.

Sample (N = 144)					
ACE-IQ (before age 18)	Many times (%)	Sometimes (%)	Never (%)	Refuse (%)	At least once reported (%)
<i>Relationship with parents</i>					
Parents listened to you.	80 (55.6)	32 (22.2)	30 (20.8)	2 (1.4)	112/144 (77.8)
Parents tried hard to know what you were doing in your free time.	63 (43.8)	24 (16.7)	57 (39.6)	0 (0)	87/144 (60.5)
<i>Neglect</i>					
Not given enough food.	5 (3.5)	1 (0.7)	134 (93.7)	3 (2.1)	6/144 (4.2)
Guardian/parent intoxicated.	16 (11.3)	5 (3.5)	117 (82.4)	4 (2.8)	21/144 (14.8)
Not sent to school.	5 (3.5)	4 (2.8)	134 (93.7)	0 (0)	9/144 (6.3)
<i>Household Dysfunction</i>					
	Yes (%)	No (%)	Refuse (%)		
Household member was an alcoholic or drug abuser.	37 (25.9)	106 (74.1)	0 (0)		
Household member had depression or was mentally ill.	29 (20.3)	113 (79.0)	1 (0.7)		
Household member was jailed.	17 (11.9)	126 (88.1)	0 (0)		
Parents divorced.	33 (23.1)	108 (75.5)	0 (0)		
Parent/guardian died.	23 (16.1)	120 (83.9)	0 (0)		
	Many Times (%)	Sometimes (%)	Never (%)	Refuse (%)	At least once reported (%)
Saw/heard household member screamed at or humiliated.	48 (33.8)	24 (16.9)	70 (49.3)	0 (0)	72/144 (50.7)
Saw/heard household member beaten.	29 (20.1)	25 (17.4)	89 (61.8)	1 (0.7)	54/144 (37.5)
Saw/heard household member hit with an object.	20 (13.9)	12 (8.3)	110 (76.4)	2 (1.4)	32/144 (22.2)
<i>Emotional Abuse</i>					
Household member yelled at, or humiliated you.	49 (34.3)	41 (28.7)	53 (37.1)	0 (0)	90/144 (63)
Household member threatened to abandon you.	36 (25.4)	31 (21.8)	75 (52.8)	0 (0)	67/144 (47.2)
<i>Physical Abuse</i>					
Household member hit you.	38 (26.6)	27 (18.9)	78 (54.5)	0 (0)	65/144 (45.5)
Household member hit you with an object.	24 (16.9)	13 (9.2)	105 (73.9)	0 (0)	37/144 (26.1)
<i>Sexual Abuse</i>					
Someone touched you in a sexual way.	7 (5.0)	14 (9.9)	120 (85.1)	0 (0)	21/144 (14.9)
Someone made you touch their body in a sexual way.	7 (4.9)	7 (4.9)	128 (90.1)	0 (0)	14/144 (9.8)
Someone attempted oral/anal/vaginal intercourse with you.	4 (2.8)	7 (4.9)	131 (92.3)	0 (0)	11/144 (7.7)
Someone actually had oral/anal/vaginal intercourse with you.	3 (2.1)	3 (2.1)	136 (95.8)	0 (0)	6/144 (4.2)
<i>Peer Violence</i>					

(Continued)

Table 3. (Continued).

Sample (N = 144)					
ACE-IQ (before age 18)	Many times (%)	Sometimes (%)	Never (%)	Refuse (%)	At least once reported (%)
Often bullied	22 (15.5)	27 (19.0)	93 (65.5)	0 (0)	59/144 (34.5)
Been in a physical fight	74 (52.5)	43 (30.5)	23 (16.3)	1 (0.7)	117/144 (83)
<i>Community Violence</i>					
Saw someone beaten up.	79 (55.6)	39 (27.5)	23 (16.2)	1 (0.7)	118/144 (83.1)
Saw someone stabbed or shot.	35 (24.6)	44 (31.0)	62 (43.7)	1 (0.7)	79/144 (55.6)
Saw someone threatened with a knife of gun	50 (35.2)	41 (28.9)	51 (35.9)	0 (0)	91/144 (64.1)
<i>Collective Violence</i>					
Forced to leave home	25 (17.5)	39 (27.3)	79 (55.2)	0 (0)	64/144 (44.8)
Home destroyed	4 (2.8)	17 (11.9)	122 (85.3)	0 (0)	21/144 (14.7)
Beaten up by military, police, etc.	15 (10.5)	33 (23.1)	94 (65.7)	1 (0.7)	48/144 (33.6)
Family member(s) killed by military, police, etc.	6 (4.2)	19 (13.3)	118 (82.5)	0 (0)	25/144 (17.5)

This has not yet been studied within the framework of addiction in this area or in the Arab Middle East, and hence the importance of this study. We expanded on previous findings and contributed to this line of research by reporting the prevalence and frequencies of CAs in outpatients seeking treatment for SUD in a Lebanese addiction center.

Our findings support previous research suggesting that CAs are prevalent in SUD patients, since almost all our sample has experienced at least 1 CA before age 18, with the majority having experienced 6 or more before age 18. In line with Itani et al. (2014), the most prevalent forms of CAs reported by our sample were related to communal violence. This could be explained by the numerous wars and socio-political instabilities Lebanon faces. For example, almost half of our sample was forced to leave their homes due to war-related events. In turn, such stressful environments may have negative repercussions on several areas in their lives, and may lead to risky behaviors such as drug use. Nevertheless, more research is needed to establish and generalize these findings.

Heroin use appears to be the leading cause for treatment seeking; this is not surprising, and is congruent with findings of Karam, Ghandour, Maalouf, Yamout, and Salamoun (2010). Also, since Skoun is the first outpatient facility to provide Opiate Substitution Treatment and free of charge psychotherapy, it is one of the most sought destinations by those seeking treatment for heroin use disorder as outpatients in Lebanon.

The results of this study should be viewed in light of several limitations. First, both our sample is not representative of outpatients seeking treatment for SUD in Lebanon, and therefore the results cannot be generalized in this context. Second, seeing the sensitive nature of the present topic, we can assume that not all of our participants reported all of their exposures to CAs, especially those pertaining to domains such as sexual abuse. Third, we limited our report to descriptive results and thus did not draw conclusions between exposures to adversity and health outcomes; our aim was to map out the prevalence of adversities in both samples. Fourth, seeing the high male-to-female ratio, we did not extend our analysis to compare exposures to adversities across genders, and we had to drop all female participants from the analyses. Finally, we did not determine the causal pathway starting from exposure to CA leading up to the development of SUD.

5. Conclusion

The present study is the first to map out the prevalence of CAs by domains of adversity in a sample of outpatients seeking treatment for SUD in Lebanon. Prevention and intervention strategies can be informed by our results. Future research can expand on our findings by designing more elaborate studies to investigate the development of SUD in high-risk populations such as the one depicted in this research.

Disclosure statement

No potential conflict of interest was reported by the authors.

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