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Exploring the effects of early trauma in a Forensic High Secure population: evaluating associations between Adverse Childhood Experience and diagnosis of Antisocial Personality Disorder

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INTRODUCTION

Adverse family environments have suggested susceptibility to virtually all psychiatric pathologies. Large scale surveys have shown that early stress within the family is associated with anxiety, depression, substance misuse, psychotic disorders and antisocial behaviour. It has been reported that childhood social stressors trigger related risks for transdiagnostic psychopathologies. Adverse childhood experiences (ACEs) are known to contribute to the development of personality disorder and it is worth noting that significantly higher rates of childhood sexual abuse, physical abuse, neglect and early separation from parents have been found in those diagnosed with antisocial personality disorder (ASPD). Abuse and/or neglect in childhood is a statistically significant predictor of adult symptoms of ASPD, even when demographic factors and criminal history are controlled for.

Though there appears to be a strong correlation between early adversity, poor attachment and later development of personality disorders and criminality, there is little literature pertaining to the question of whether ACEs are associated specifically with a later diagnosis of ASPD in patients requiring detention in a high secure psychiatric facility, and whether this association is particularly stronger with any specific type of ACE.

RESULTS

221 patients were identified of which 80% were male. There was an expected gender discrepancy with an excess of male patients, due to the relatively higher proportions of men within high secure hospitals. Most patients were from white ethnicity, and almost equal proportion of patients suffered from personality disorder (including ASPD) and psychotic conditions.

ACE categories of physical abuse, sexual abuse, divorced/separated parents and substance abuse in parents alongside LAC status had a significantly higher prevalence in ASPD than the remaining sample, whilst the remaining ACEs had no significant differences for either sample. The total number of ACEs was also found to have a statistically significant association with the subsequent diagnosis of ASPD.

Evidence of ACEs in patients not diagnosed with ASPD (n=184)											
	Abuse				Household dysfunction						
	Physical	Emotional	Sexual	Neglect	Parental mental illness	Domestic violence	Divorced / separated parents	Imprisoned parents	Substance abuse in parents	Mean number of total ACEs (SD)	Looked after child (LAC) status
Y	83 (45%)	122 (66%)	77 (42%)	53 (29%)	60 (33%)	68 (37%)	101 (55%)	13 (7%)	44 (24%)	3.26 (2.25)	83 (45%)
N	101 (55%)	62 (34%)	107 (58%)	131 (71%)	124 (67%)	116 (63%)	83 (45%)	171 (93%)	140 (76%)		101 (55%)
Evidence of ACEs in patients diagnosed with ASPD (n=36)											
Y	23 (64%)	22 (61%)	27 (75%)	11 (30%)	12 (33%)	17 (47%)	28 (78%)	4 (11%)	13 (36%)	4.13 (1.96)	22 (61%)
N	13 (36%)	14 (39%)	9 (25%)	25 (70%)	24 (67%)	19 (53%)	8 (22%)	32 (89%)	23 (64%)		14 (39%)
Sig.	.023*	.169	.001*	.571	.281	.644	.048*	.183	.044*	.017*	.001*

Analysis was also carried out to establish whether there was a significant improvement, reflected by reduction in number of incidents, in the patients in any of the three services as well as the category of patients specially with a primary diagnosis of ASPD. This was done by comparing number of IR1s in year 1, 3 and 5 of admission to look at change over time. While there was reduction in number of IR1s in almost all categories over time, mental health and women's services show consistent improvement in year 1-3 and year 1-56, whereas personality disorder and ASPD showed no significant improvement in year 1-3 but did show significant improvement in the longer term of year 1-5.

CONCLUSIONS

- The current evaluation elicits the link between certain categories of ACE and diagnosis of ASPD in a high secure psychiatric setting. To further explore the mechanisms underlying this association and establish the aetiological connections of such disorders, research method employing a structured interview with participants might be used to investigate the chronicity, duration and severity of environmental exposures at various developmental stages.

AIMS

This study was conducted with an aim to elicit any association between number and type of ACEs; looked-after child (LAC) status; as well as incident report (IR1) frequency and ASPD diagnosis in a high secure hospital setting.

METHODS

Data were collected from a sample (n=221) including all patients in the Mental Health, Personality Disorder and Women's Services at a high-secure hospital. Records were examined for evidence of abuse/neglect during childhood, and a number of markers of household dysfunction. The statistical relationship between each ACE category and subsequent diagnosis of ASPD was examined through paired t-tests. Frequency of IR1s involving violence was compared in the first, third and fifth years post admission.

DISCUSSION

A significant association was identified between adult diagnosis of antisocial personality disorder in a high secure setting and ACEs including physical abuse, sexual abuse, and parental substance misuse. We also found an increased likelihood of diagnosis of ASPD as the total number of ACE categories increased. This echoes the available evidence in other populations and current understanding of the development of personality disorders. It was notable that the experience of emotional abuse was not significantly linked with an ASPD diagnosis. It is perhaps the likeliest category to be omitted from psychiatric interviews and medicolegal documentation due to the insidious and relational nature of such abuse, in contrast with, for example, physical or sexual abuse which occurs in the context of a specific incident and might be readily recalled on questioning. There is likely both genetic and environment/developmental factors at work in imprisoned parent and parental substance misuse linkage with ASPD. There may be an underrepresentation of patients with ASPD due to diagnostic overshadowing with other serious mental illnesses, or patients may be at too early a stage of their treatment pathway to have been confidently diagnosed with ASPD. The highest risk or most mentally disordered patients with ASPD may also have been remitted back to prison, possibly due to risk incidents or due to un-treatability of their mental disorder and consequent loss of grounds for detention under the Mental Health Act.

No linkage was identified between number of IR1s and diagnosis of ASPD. Perhaps this is to be expected within a high secure inpatient population, given patients admitted to conditions of high security tend to have high risk acuity, regardless of their specific diagnosis. A decline in IR1 frequency was seen over time across all services, which reflects positively on the intervention of the high secure hospital in reducing the risk of violence and aggression. However, it must be considered there may be an attrition bias due to the loss to follow up of patients who may be remitted back to prison.

Care must be taken to thoroughly explore the childhoods of all patients within any secure hospital population. This information should be used in context of the patient's wider history to map the patient's early experiences, in order to better understand their personality traits and improve the therapeutic relationship.

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